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ABSTRACT

The Metropolitan Nashville Public Schools' Vocational Education Exemplary Project provided support for the establishment of critical linkages among all vocational delivery systems in the metropolitan Nashville area. The anticipated outcome of the project was an articulation model to ensure that instruction and guidance would allow students to (1) move with continuity and without hindrance from one level to the other, (2) be placed directly into the job market, and/or (3) make a meaningful choice relative to occupational pursuits. (Articulation was defined by project staff to mean the planned process that promotes the transition of students within levels of instruction as well as between the secondary and postsecondary levels of instruction and allows students to move with continuity and minimum hindrance through each level.) To determine how the Nashville area educators felt about working more closely with each other, a vocational education needs assessment was developed and sent to almost 500 secondary and postsecondary respondents. Generally, the educators agreed on what methods would be most effective to improve K-14 articulation in the Metro Nashville Community. In addition, respondents indicated that articulation activities were currently limited but that efforts were needed to bring about more cooperation and sequenced programming/instruction among the levels of the educational process. Recommendations were made as a result of the survey to implement articulation activities. (Appendixes include the survey form and extensive tables illustrating responses.) (Author/KC)

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VOCATIONAL EDUCATION DELIVERY SYSTEMS

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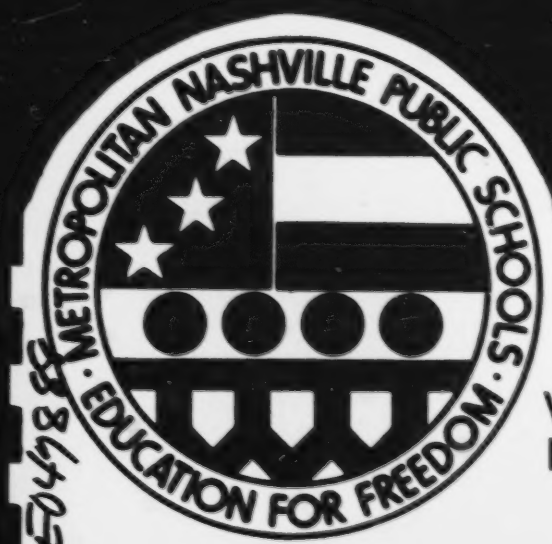

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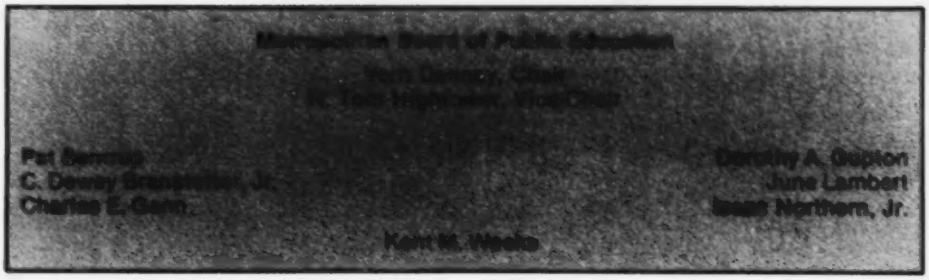

ARTICULATION:
Vocational Education Delivery Systems

UNITY FOR A QUALITY VOCATIONAL DELIVERY SYSTEM
IN THE METRO NASHVILLE COMMUNITY

1985

The material within was prepared under contract with the Tennessee State Department of Education, Division of Vocational Technical Education. Contractors undertaking funded projects are encouraged to express freely their professional judgment in conducting projects. However, opinions expressed may not reflect those of the funding agent, and no endorsement by that agency should be inferred.

ABSTRACT

The Metro Schools' Vocational Education Exemplary Project, entitled "Unity for a Quality Vocational Education Delivery System for the Metro Nashville Community", provided support for the establishment of critical linkages among all vocational delivery systems in the Metro Nashville area. The anticipated outcome of the project was an articulation model for the Metro Nashville Public Schools which could ensure that instruction and guidance would allow students to 1) move with continuity and without hinderance from one level to the other, 2) be placed directly into the job market, and/or 3) make a meaningful choice relative to occupational pursuits.

Articulation was defined by Project Staff to mean the planned process which promotes the transition of students within levels of instruction (horizontal articulation) as well as between the secondary and postsecondary levels of instruction (vertical articulation) and allows the student to move with continuity and minimum hindrance through each level.

To determine how Metro Nashville area educators felt about working more closely with each other, the Vocational Education Needs Assessment Questionnaire was developed and administered to almost 500 secondary and postsecondary respondents. Major issues the survey attempted to address were:

- Is there a need for articulation?
- What kinds of articulation activities are presently taking place in the Metro Nashville area?
- What directions should we take in the future?

Generally, the secondary and postsecondary administrators, instructors, and counselors were in agreement on what methods would be most effective and should be initiated to improve K-14 articulation in the Metro Nashville Community. In addition, all six respondent groups indicated that articulation activities were currently limited

but that efforts were needed to bring about more cooperation and sequenced programming/instruction among the levels of the educational process.

Recommendations were developed based on the results of the survey and a search of the literature (see pp. 52-57 of the report entitled **Articulation: Vocational Education Delivery Systems**).

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INTRODUCTION

Articulation is the planned process which provides linkages in curricula and programs within and among all levels of education. With the individual student needs as the focal point of learning, articulation offers an uninterrupted sequence of meaningful learning experiences for students progressing from elementary to secondary and postsecondary levels and into the work force.

Educational leaders and the public readily accept the fact that, as research supports, cooperative training programs between vocational education and business/industry are effective ways to provide occupational preparation. Less known but of equal importance are the benefits derived from cooperative educational and training provisions linking secondary schools with postsecondary institutions (Lewis & Pratzner, 1984).

Developing cooperative linkages between secondary institutions and postsecondary institutions provide secondary students with a systematically planned curriculum in occupational areas and a process to follow as they work toward their educational and career goals (Conn, 1984). These linkages may include programs which offer advanced placement at the postsecondary level for secondary students who qualify.

Secondary schools have become less of a "terminal" educational program with the fairly recent growth and accessability of one- and two-year postsecondary programs. Although many high school students go into immediate employment following graduation and too many other students drop out before completing high school, there are significant numbers of students who go directly into two-year postsecondary institutions (Lewis & Pratzner, 1984).

Overlapping curricula and facilities among secondary schools and colleges have led to a demand for better interinstitutional cooperation and coordination of occupational programs. With limited funding, public secondary and postsecondary institutions cannot afford to duplicate expensive vocational education training equipment, faculty, facilities and programs (Lewis & Pratzner, 1984).

Secondary schools are facing difficult times as equipment and facilities become outdated compared to the technological changes and occupational developments in the labor market. Too, predictions are that secondary school enrollment will continue to drop for at least the next ten years and faculty are likely to leave for more lucrative jobs in industry. Since these occurrences are likely to weaken the secondary level of educational programs, the waste of time and resources of both students and institutions will no longer be justified or tolerated. Solutions for these problems should be sought by developing the processes of coordination and articulation between secondary and postsecondary level programs and by establishing mechanisms for obtaining advanced credit at the postsecondary level for relevant secondary level vocational education and training.

Metropolitan Public Schools received a grant from the Tennessee Department of Education, Division of Vocational-Technical Education, to initiate a unified effort to improve vocational program quality through curriculum analysis, community involvement, and interagency cooperation. The Metro Schools' Vocational Education Exemplary Project, entitled "Unity for a Quality Vocational Education Delivery System for the Metro Nashville Community", provided support for the establishment of critical linkages among all vocational delivery systems in the Metro Nashville area. Major tasks of the project included: 1) conducting a comprehensive program inventory of vocational delivery systems within the Metropolitan Nashville Community, 2) conducting a survey

to determine the work force needs of business and industry, and 3) leading efforts to improve cooperation in vocational planning.

The anticipated outcome of the project was an articulation model for the Metro Nashville Public Schools which could ensure that instruction given at both secondary and postsecondary levels would allow students to 1) move with continuity and without hinderance from one level to the other, 2) be placed directly into the job market, and/or 3) make a meaningful choice relative to occupational pursuits.

It was hoped that the project would serve as a vehicle to foster active involvement in vocational education planning. Since learning experiences for students encompass both the horizontal movement between schools, systems, and programs, and the vertical movement between grade levels and educational units, it was considered to be of utmost importance to develop articulated curricula. The Project Staff attempted to address the need for uniformity within the Metro Nashville School System and between the postsecondary institutions in the area by involving input from the business community and public and private postsecondary institutions.

Project Staff recognized that the articulation process among Metro Nashville Schools and postsecondary institutions in the area was hindered due to factors common to most large urban areas. Many of the reasons for the articulation problems were identified as being related to a lack of smooth, student matriculation due to unsequenced programs, lack of content continuity, lack of resource coordination, lack of identified student competencies, and misunderstandings due to poor communication. Developing a process for formal input and communication among all agencies and institutions was considered to be the first step needed in developing institutional and interagency coordination in the Nashville area. Metropolitan Public Schools proposed to serve as the initiator of the effort and requested through correspondence and personal contacts that area institutions offer their support and cooperation (see correspondence in Appendix B).

To determine how Metro Nashville area educators felt about working more closely together, the Vocational Education Needs Assessment Questionnaire was developed and administered to almost 500 secondary and postsecondary respondents. Three major issues the survey attempted to address were:

* Is there a need for articulation?
* What kinds of articulation activities are presently taking place in the Metro Nashville area?
* What directions should we take in the future?

Articulation was defined by Project Staff to mean the planned process which promotes the transition of students within levels of instruction (horizontal articulation) as well as between the secondary and postsecondary levels of instruction (vertical articulation) and allows the student to move with continuity and minimum hindrance through each level.

RELEVANT INFORMATION

As of October 1984, at least 12 states had launched efforts to develop sequential programs linking the last two years of high school and postsecondary vocational education (Bottoms, 1984b). As an example, in some parts of Michigan vocational education students completing high school courses can earn from 3 to 18 advanced placement credit hours because of articulation agreements with several community colleges (Conn, 1984). Five sites were selected throughout the state to design a Competency Based Education (CBE) process for articulation between secondary and postsecondary vocational education. Vocational instructors from the community colleges, high schools, and vocational technical skill centers worked together to develop the curriculum. Advisory committees were involved in several stages of the coordinated effort. Currently, competency records are maintained throughout each student's secondary vocational

experience. Through the competency record and a course equivalency record provided by the community college, the secondary school instructor determines if the student has reached competency for that task.

North Carolina has joined a consortium to develop a technical curriculum that will be designed to ensure a solid grasp of practical principles and concepts, improve science and math skills, and provide hands-on shop/lab experiences for students ("Principles of Technology", 1985). North Carolina educators believe that technicians for the high-tech methods of the future will need to be more broadly trained so that they can deal with a variety of technical systems. They theorize that these "super technicians" will likely require four years of training which should start at the 11th grade and terminate with a two-year associates degree at a technical college. Several activities and materials are being field tested which include offering technical math courses at the 10th grade level and demonstrating shop/lab experiments as vocational-technical instructors team teach with science and math teachers. After initial field tests are completed, plans are that other high schools will offer the Principles of Technology curriculum.

A state that is well under way in its effort to link the last two years of high school with the two years of postsecondary programming (also known as the "Two-plus-Two" plan) is Virginia (Bottoms, 1984b). State appropriations have been obtained for a number of developmental projects based on the notion that advanced level technical and skill workers need a broad base of knowledge which cannot be developed in two years at either the secondary or postsecondary level.

Also in Virginia, A Plan for Unparalleled Achievement was adopted by the Richmond School Board to bring about the horizontal linking of vocational and academic programs in both philosophy and practice (Hunter, 1985). The plan called for coordinated vocational and academic programming. In addition to increasing consistency and coordination between vocational and academic courses, the school board called for reviewing and

strengthening vocational and academic career counseling programs, expanding the number of pre-technological and vocational courses for students, and requiring all high school students to take vocational courses.

In the spring of 1981, members of the Arizona House and Senate authorized a special joint interim committee to produce a bill that would move vocational programs into a closer relationship with the needs of the state's emerging economic base (Lindeman, 1985). The committee found that the most significant problems of the existing vocational programs were 1) outdated programs and equipment in the secondary system, 2) the lack of any concrete coordination between high school and community college programs, 3) a fragmentation of policy formation at the state level, and 4) a lack of serious attention to the changing job market, especially by the secondary system. The joint committee recommended that planning committees be formed to specifically look at articulation of programs and the cooperative use of facilities and equipment, and to determine whether or not programming responded to the real job market. The joint committee decided that the secondary school's responsibility was to provide basic academic and generic skills leaving training and job specific skills to employers although a plan could be developed to specify competencies as indicators to employers. Senator Lindeman (1985), who served on the committee, concluded that the end result of the committee's process to improve vocational education was a definite move toward articulation of programming, joint use of facilities, skill competency development, and more business involvement at the local level.

The State Board of Education of Illinois has proposed that formal articulation agreements between secondary and postsecondary levels address the following concerns:

* Program alignment and continuity in a given occupational area
* Transition of students from one level to another in occupational areas without unnecessary delay or duplication of effort

* Where possible, cooperation and joint use of facilities, equipment, and staff

* Cooperative efforts in the continuous evaluation and improvement of programs (Galloway & Washburn, 1985)

Several collaborative efforts between secondary and postsecondary institutions in Illinois were briefly described in the Galloway and Washburn article (1985). An example of such an effort includes a college where 16 secondary drafting instructors are involved in inservice training using computer-assisted design equipment; the secondary and postsecondary instructors developed an articulated, competency-based curriculum for a drafting program in grades 11 through 14. Another Illinois college provides classroom facilities and instructors for high school students during the day which allows the students to take courses not available in their local high schools. Still another college initiated and supports articulation between the secondary and postsecondary health occupations programs which means that students can transfer from one educational level to another without repetition of content.

The Dallas County Community College District (DCCCD) and 13 secondary school districts in the Dallas area developed articulation procedures which have led to successful transfer of credits from the secondary to the postsecondary level; occupational programs in 14 areas have been articulated (Emerson & Free, 1984). The major objective of the articulation effort was the preparation of a manual for each program area which identified the competencies a student must possess to receive credit for a specified course in DCCCD. Students are granted equivalency credit for courses in the DCCCD if they can demonstrate mastery as defined for 80% of the competencies (including all the cores) in the manual.

Students at the Yazoo City (Mississippi) Vocational-Technical Center can enroll in a pre-technical education preparatory program for students who plan to enter postsecondary vocational, technical, high-technology or computer-related areas of study after high school ("Pre-Tech Pilot Program", 1985). The program incorporates the "two-

plus-two" approach by being a two-year program of studies designed for the 11th and 12th grade students where they are offered a broad, basic background in technology and can then enter more advanced courses in their chosen field at a two-year, postsecondary institution.

At Cerritos College (CC) in California, a project was undertaken to establish a statewide model for the development of articulated trade and industry curriculum materials and methods that would allow students to move from the secondary to the college level without loss of time or resources (Stewart, 1982). Among the many involvements of the project were the development of steering and advisory committees and a series of meetings to compare courses and materials leading to the development of articulated curricula. In addition, an articulation policy was established and articulation agreements were made between Cerritos College and other institutions. Furthermore, a certification process for students completing articulated courses was developed.

According to Smalley (1979), an Indiana curriculum project which addressed the need for establishing an articulation plan proved to be workable for students, staff, and administrators. Project Staff felt an articulation plan was needed to provide for vertical movement of vocational students from the secondary to postsecondary levels. The major objectives of the project were to develop and implement an economically feasible articulation plan, implement an inservice staff training program, develop a joint performance-based curriculum plan for four program areas, and develop a process for continuing curriculum development. The author stated that the project demonstrated that staff can be trained to develop performance-based programs and can change to performance-based vocational education without disrupting the efficient operation of existing programs.

The Bureau of Educational Research and Services of Memphis State University

examined the status of articulation between secondary and postsecondary institutions in the state of Tennessee (Petry, 1978). Six instruments were constructed and used by the staff to conduct a survey which included 1,645 educators, students, and laypersons involved in vocational education in Tennessee. The survey population represented public and private school administrators, faculty members, counselors, and students, as well as advisory council members, state department of education personnel, and directors and students associated with special programs, correctional institutions, and apprenticeship programs.

Some of the conclusions of the study were that 1) there is a lack of formal articulation agreements between and among institutions in Tennessee, 2) standardized course and program objective have not been widely used in vocational education programs in Tennessee and efforts by institutions to develop objectives and competencies with other institutions have been minimal in recent years, 3) credit awarded students for competencies, previous course work, work experience, etc., has occurred only on a very limited basis, 4) employers should be involved in curriculum planning and development both in secondary schools and in postsecondary institutions, 5) students felt that they had received effective guidance in planning their vocational programs while enrolled in postsecondary programs but not when enrolled in high school, 6) respondents indicated positive feelings about secondary school personnel involved in guidance and counseling, and 7) personnel in the Tennessee Department of Education should assume a larger responsibility for leadership in affecting articulation in the state (Petry, 1978).

Project MAVE was the acronym for a project which established a Model for Articulated Vocational Education (Artis, 1981). An articulation guide was developed by Project Staff as one in a series of products. The project was initiated because Illinois educators became aware that there was a need to strengthen all of the articulation activities within their educational system. The information that was gathered from 1,100

written surveys, 49 personal interviews, 35 Illinois site visitations, 6 formative and evaluative conferences, and a literature review provided information leading to the conclusion that there are four major components for articulating vocational programs and services, which are: 1) building a cooperative climate, 2) expanding communication among staff, 3) developing sequenced K-14 programs, and 4) coordinating K-14 services.

The MAVE Project Staff emphasized that the key goal is for the committed institution to a) establish institutional communication and b) begin a planned articulation effort to establish goals for increasing activities as successes are realized. Yet, no matter what an institution's goals and needs might be, the staff emphasized that the first step is to establish a good foundation supported by a cooperative climate. The staff further stated that a cooperative climate can come about through the formation and use of an articulation roundtable which should be composed of representatives of each institution or agency, working and planning together for the purpose of articulating secondary and postsecondary vocational programs and services.

Since Tennessee developed a comprehensive secondary vocational education system beginning in 1973, the state has reportedly been a leader or model for other states in the area of vocational development. The Tennessee Board of Vocational Education and the Tennessee Department of Education felt that if Tennessee were to remain the leader in secondary vocational education, then educators must be prepared to change as time and technology demand (Tennessee Task Force for Secondary Vocational Education, 1983). The State Board for Vocational Education directed that a task force on secondary vocational education be appointed to conduct a review of the quality standards and outcomes of a secondary vocational education system in Tennessee. The task force was charged with providing recommendations to the State Board for Vocational Education's Advisory Committee. The secondary task force was comprised of individuals from business advisory councils, training programs, vocational teaching, local

administration, state administration, special needs, industry, and counseling. Recommendations were formulated by the group concerning the role, scope, and program offering for secondary vocational education in Tennessee for the 1980's and 1990's.

Of the 10 major educational categories which the Tennessee Task Force addressed, there were 3 which were particularly relevant to articulation--a) Secondary Vocational Program Sequence, b) Secondary Career Counseling, and c) Articulation with Postsecondary Training. Some of the Task Force's recommendations which were related to these 3 major categories included:

* The middle/junior high school curriculum should include pre-vocational experiences which offer introductory skills for occupational clusters and career counseling.

* The development of standard state course guides for each vocational offering should provide a sequence of instruction and skills development.

* A task force should be appointed to review existing counseling programs and design various models for implementation which would consider urban/rural, comprehensive high school/vocational center, and placement coordinator/ career specialist issues.

* A statewide articulation plan should be developed and adopted by all governing bodies concerned. A permanent task force should be established to implement and monitor the plan.

* A uniform mechanism for recognizing and awarding credit for job competencies achieved at the secondary level should be developed and utilized at all state-operated, postsecondary institutions.

Dickerson (1984a) stated that educators must develop effective, ongoing articulation between secondary and postsecondary programs. He has observed that articulation will minimize unnecessary conflicts and hardships for students as they move from the secondary level to postsecondary level. Too, articulation enables educators to make the most of the diminishing training funds available to educational and training programs. Otherwise, Dickerson foresees that business and industry will look to other sources or they will rely on on-the-job training for their work force needs. Galloway and Washburn (1985) added

to the concept of articulation by reporting that systems working together can enter into partnerships to support the delivery of high-quality, high-cost programming and that partnerships such as those with business and industry must exemplify the best use of joint staffing, curriculum, equipment, and facilities.

According to Bottoms (1984a, p.9), "there is a need to develop planned, purposeful, and sequential vocational curriculums that span the last two years of high school and the first two years of postsecondary education, and are connected to planned, on-the-job learning experiences. Such curriculums provide the opportunities for students to connect the academic subjects with the practices in a broad educational field". Bottoms (1984c) pointed out in a later article that educators also need to examine the sequence of vocational curricula so that they can coordinate the vocational curriculum with the pre-vocational curriculum. In addition, comprehensive institutions need to look at ways to structure the curriculum so that greater use is made of the academic curriculum in supporting students in their vocational objectives.

Articulation can be a way of giving high school students who do not go on to four year colleges the same rigor and sense of direction as their college preparatory peers receive. Dale Parnell (King, 1985), President of the American Association of Community and Junior Colleges, sees articulation programs established between secondary and postsecondary institutions as a way to prepare students for skilled occupations that are growing in demand but do not require a bachelors degree. What the occupations do require, according to Parnell, are four years course work in math, science, and technical subjects that could best be fulfilled by providing programs which would start in the 11th grade and culminate four years later in an associate degree from a postsecondary educational institution. Some examples of occupations which fit this description are workers with skills in microelectronics, biomedical equipment, computer-assisted drafting, health care, lasers, automated manufacturing, and robotics.

Closely aligned with the concept of articulation is "transition pathway", which is a concept of the progression beginning with entry into high school and continuing until work is established as the major activity (Campbell, Gardner, and Winterstein, 1984). Such pathways involve periodic choices and stages of development. The Campbell et al. (1984) study on transition patterns revealed that "delay" in entering a postsecondary school was found to be significant in that 75% of those who ever attended postsecondary institutions did so without delay. Students experiencing even one interruption were unlikely to earn a degree. Conclusions were that when there is a lack of clear goals or obstacles are present, the student is less likely to earn a degree. Those who conducted the study recommended that policies should be developed which consider ways to reduce the incidence of false starts and incomplete degrees since there is evidence that credentials are significant in gaining jobs and in advancing in a career. Too, the inability to remain on an educational pathway was found to have negative consequencnes for self-esteem.

The Campbell et al. (1984) study found that the most common pathway followed was that of no formal postsecondary education. However, Bottoms (1984a) presented information concerning a recent national study which showed that 55% of the students who took six or more courses in vocational education at the high school level went on for further study at four-year or two-year postsecondary institutions or in apprenticeship and other nonpublic educational facilities. A study, by Desy, Campbell, & Gardner (1984), found that high school students who participated in vocational education to a fairly extensive degree were less likely to drop out of school than other students. Further findings were that if the students did leave school before graduation they lost the labor market benefits they might otherwise have received from their training, such as above average job satisfaction, and will probably share the unemployment problems that other dropouts experience.

The results of both studies cited above strongly indicated that secondary vocational education facilitates the basic educational development of the individual and enhances the likelihood of pursuing further education. These findings lead to the conclusion that secondary vocational education functions as a key component in the articulation process; it helps a student move more smoothly and with less hindrance from one level of instruction to another.

Why articulate? Dickerson (1984b) stressed that articulation is necessary because 1) the survival of public education depends on it, 2) the public demands it, and 3) it is in the best interest of students. He goes on to say that educators must lead articulation efforts without raising turf protection defenses. Articulation must occur in order to meet the needs of the students by making learning and training easier, more relevant and shorter, and by saving money for the students and taxpayers.

Other benefits of the articulation process cited were: 1) it improves communication and respect among secondary and postsecondary educators; 2) it helps instructors to evaluate and update their course content; and 3) it provides a format for developing new courses and revising current ones (Emerson & Free, 1984). Articulation activities can also lead to: coordinated core curricula; arrangements to transfer credit in the same occupational area from the secondary to the postsecondary level; course outlines that will be an aid to new or part-time instructors; and profile sheets which reflect the students' achievements and the skills and knowledge that can be transferred.

METHODS

The purposes of conducting the "Vocational Education Needs Assessment Questionnaire" were 1) to help determine how respondents in both secondary and postsecondary programs in the Metro Nashville area felt about working more closely together and 2) to provide information needed for the Metro Schools Vocational Division to initiate activities that would improve articulation linkages of programs and services between the secondary and postsecondary levels of instruction. The administration of the survey in the Spring of 1983 to secondary and postsecondary personnel was considered by Vocational Education Exemplary Project (VEEP) staff to be a first step toward improving institutional and interagency coordination. The desire was to develop a process for formal input and communication among all agencies and institutions (see Appendix B for samples of correspondence to postsecondary institutions).

RESPONDENT POPULATION

The secondary personnel who were attempted to be surveyed were all of the 193 vocational instructors, the 47 high school counselors, and 43 administrators of Metro Nashville Public Schools. The administrators included the Superintendent of Schools, the Assistant Superintendent of Program and Staff Development, the Coordinator of Guidance and Counseling, Vocational Coordinators, Program Assistants, and the Principals and Assistant Principals of schools with vocational programs.

From a list of private postsecondary vocational schools provided by the Tennessee Higher Education Commission (THEC), Project Staff determined that 13 of the institutions were linked by program content to Metro Schools' vocational programs. In addition, three public postsecondary institutions were identified as natural linkages to the secondary vocational programs. Of the 13 private postsecondary institutions contacted

asking for their cooperation, responses from 8 of the institutions stated that they would participate and give support to the articulation efforts of the exemplary project; participation in the completion of the questionnaire by postsecondary administrators and faculty members was one of the activities included in the cooperative committment. All of the three public postsecondary institutions agreed to participate in the efforts suggested by Project Staff.

Five private postsecondary institutions followed through with a) supplying to the Project Staff the names of the institutions' faculty members and b) completing and returning the articulation questionnaires. The three public postsecondary institutions also completed and returned the survey forms, making a total of eight participating postsecondary institutions.

SURVEY INSTRUMENT

In the early stages of selecting a survey form for the needs assessment, several articulation questionnaires were reviewed which had been previously administered. Sources that provided the most relevant suggestions for format and items for the project questionnaire included the form used by the Maryland Articulation Research Study (Opachinch, 1974). In addition, the "Articulation Opinionnaire", which was a component of a proposed model for improving articulation in vocational education (Malone, 1976), was composed of a few items that were useful in the development of the VEEP Needs Assessment Questionnaire. Project Staff also found the "9-14 Needs Assessment Questionnaire", which was presented as a part of a model for articulated vocational education funded by the Illinois Board of Education (Project MAVE) helpful in determining items for the local survey form (Artis, 1981).

A fourth source that offered significant help in drafting the Needs Assessment Questionnaire for Metro Schools' Exemplary Project was entitled "Tennessee Vocational

Education Articulation Project: Final Report" (Petry, 1978). Six instruments were constructed by the Tennessee Project Staff which included a general survey as well as surveys administered to specific groups such as secondary school personnel, postsecondary school personnel, and vocational students.

The Director of Metro Schools Department of Research and Evaluation was frequently consulted during the drafting of the project's Needs Assessment Questionnaire. Drafts of the questionnaire were sent, along with requests for reactions, to Metro Schools' Director of Vocational Education and to the Assistant Superintendent of Curriculum and Instruction. The Third Party Evaluator for the project and members of the Department of Data Processing of Metro Schools were also consulted as the questionnaire was being developed. Subsequently, drafts were sent for field testing to certain Metro Schools' personnel who included three teachers, two counselors, one vocational education administrator, and one program assistant. The field testers were asked to complete an inventory form that included the question, "How long did it take you to complete the instrument?". Other relevant questions concerning their opinions of the survey format and their suggestions for additions, deletions, and revisions were also solicited (See Appendix B).

The finalized survey form was composed of three sections. The same items in Sections I and II were administered to both secondary and postsecondary subjects. However, several of the items in Section III varied in wording or were different in content according to whether the form was sent to the secondary or postsecondary faculty members. To facilitate ease and accuracy in administering the survey and in compiling the results, the survey forms were color coded — blue for secondary subjects and green for postsecondary subjects. The definition for articulation adopted by Project staff was stated on the survey form as follows: "Articulation means the planned process

within the educational system which promotes the transition of students between the secondary and postsecondary levels of instruction and allows the student to move with continuity and minimum hindrance through each level. A copy of the questionnaire can be found in Appendix A.

PROCEDURE

A survey form and a letter of explanation were sent through school mail to the 283 administrators, instructors, and counselors surveyed within Metro Schools (See Appendix B). The rates of return for the administrators, instructors, and counselors were 65.1% (N=28), 76.2% (N=147), and 61.7% (N=29), respectively, for an overall rate of return of 72.1% (N=204). Table 1 presents the number surveyed and the number returned according to the level of instruction and type of institution—public or private.

Each potential postsecondary subject was sent a packet which included a response card, a self-addressed stamped envelope, and the survey form. Potential respondents were asked to indicate on the response card whether the respondent intended to return the completed survey. The purpose of the response card was to inform Project Staff whether the subject had received the information and whether the subject was interested in supporting efforts to improve linkages between public and private secondary and postsecondary vocational programs. Also, the use of the response card provided anonymity for the respondents when the completed survey form was returned at a later date. A follow-up letter was sent to potential respondents from whom no card was received. A copy of the correspondence sent to postsecondary personnel is presented in Appendix B.

Since the questionnaires for the postsecondary personnel were disseminated to each faculty by the president or designated person at each institution, Project Staff were unable to identify the faculty members according to instructor, counselor, or

TABLE 1

SUMMARY OF POPULATIONS

Vocational Education Needs Assessment Questionnaire

Subject: ARTICULATION BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

LEVEL OF INSTRUCTION (Includes Instructors, Counselors and Administrators)	Number Surveyed	Number Returned	Percent Of Return
Secondary (Public)	283	204	72.1%
Postsecondary (Public & Private)	211	139	65.9%
TOTAL	**494**	**343**	**69.4%**

TYPE INSTITUTION			
Public	448	323	72.1%
Private	46	20	43.5%
TOTAL	**494**	**343**	**69.4%**

administrator, at the time of the disseminating process. However, for the eight participating postsecondary institutions, Project Staff sent a total of 211 postsecondary forms, which was the total number specified as needed by the participating institutions. There were forms returned from 31 administrators, 102 instructors, and 6 counselors for a total of 139 forms or a return rate of 65.9%.

Of the 494 secondary and postsecondary personnel that Project Staff attempted to survey, there were a total of 343 forms completed and returned. As Table 1 shows, the overall rate of return was 69.4%.

DATA ANALYSES

Project Staff and advisors decided that the purposes and needs for conducting the survey called for a descriptive presentation of the results, thus, the analyses included comparisons of frequency counts and percentages. A Spearman's rank-order correlation coefficient analysis was computed on the sections of items for which secondary and postsecondary respondents received the same survey form (Sections I and II). A series of t tests and 1-way and 2-way analyses of variance were also conducted.

Sampling limitations may have affected the accuracy of the questionnaire results. In addition, nonsampling errors may have resulted from such factors as response errors, processing errors, weak questionnaire design, computational errors, and nonresponses.

RESULTS

Generally, the secondary and postsecondary administrators, instructors, and counselors were in agreement with each other on what methods would be most effective and should be initiated to improve K-14 articulation in the Metro Nashville Community. All six respondent groups indicated that articulation activities were currently limited but that efforts were needed to bring about more cooperation and sequenced programming/instruction among the levels of the educational process.

Tables of frequencies and percentages (Tables 1-SA thru 6-PC) and means and standard deviations (Tables C-1 thru C-3) for the responses of each of the six populations are presented in Appendix C. Results of statistical analyses not presented in these results are available upon request.

SECTION I: AGREEMENT/DISAGREEMENT

Suggested Activities and Their Effectiveness Toward Improving Articulation

The activities presented in Section I of the survey which ranked highest in agreement that would be most effective toward improving articulation can be noted in Table 2 in the **All Respondents** section of results. Over 75% of all respondents marked "Strongly Agree" or "Agree" that the activities which would be most effective toward improving articulation are the following:

Item #12 - Teacher visitations to other schools
Item # 2 - Shared course descriptions and program requirements
Item # 1 - Joint meetings with staff from other schools
Item # 3 - Coordinated program objectives
Item # 5 - Exchanged curriculum guides

The first 4 of the 5 items were ranked or tied by both secondary and postsecondary personnel as the top 4 out of 20 activities seen as being most effective toward improving articulation between secondary and postsecondary institutions.

Table 2

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: SUGGESTED METHODS AND THEIR EFFECTIVENESS TOWARD IMPROVING ARTICULATION

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section I-Agreement/Disagreement

Results of "Strongly Agree" and "Agree" Responses

Activity	Secondary Respondents N=204			Postsecondary Respondents N=139			All Respondents N=343		
	Rank	Freq.	% of N	Rank	Freq.	% of N	Rank	Freq.	% of N
12. Teacher visitations to other schools	3	174	85.3%	1	122	87.8%	1	296	86.3%
2. Shared course descriptions and program requirements	2	179	87.8%	3	107	77.0%	2	286	83.4%
1. Joint meetings with staff from other schools	4	173	84.8%	2	110	79.1%	3	283	82.5%
3. Coordinated program objectives	1	180	88.2%	4	99	71.2%	4	279	81.3%
5. Exchanged curriculum guides	5	168	82.4%	6	91	65.5%	5	259	75.5%
17. Joint in-service programs	6	158	77.5%	11.5	82	59.0%	6	240	70.0%
4. Coordinated student follow-up program	7	154	75.5%	9.5	83	59.7%	7	237	69.1%
10. Joint institute career days	8	147	72.1%	8	88	63.3%	8	235	68.5%
20. Identified Occupational role for each institution	11	142	69.6%	7	90	64.8%	9	232	67.6%
9. Student transfer guides between schools	15	131	64.2%	5	96	69.1%	10	227	66.2%

Results of "Strongly Agree" and "Agree" Responses

Activity	Secondary Respondents N=204			Postsecondary Respondents N=139			All Respondents N=343		
	Rank	Freq.	% of N	Rank	Freq.	% of N	Rank	Freq.	% of N
7. General Discussions of student placement	9	144	70.6%	13	80	57.6%	11	224	65.3%
18. Joint administrative articulation meeting	12	139	68.1%	9.5	83	59.7%	12	222	64.7%
16. Coordinated testing program	17	125	61.3%	11.5	82	59.0%	13	207	60.4%
6. Jointly developed curriculum guides	13	137	67.2%	14	67	48.2%	14	204	59.5%
8. Individual discussions of student placement	14	134	65.7%	15	65	46.8%	15	199	58.0%
19. Joint program craft advisory committees	10	143	70.1%	18	51	36.7%	16	194	56.6%
13. K-14 curriculum committees	16	126	61.8%	17	55	39.6%	17	181	52.8%
14. Jointly developed student parent guides	18	114	55.9%	19	49	35.3%	18	163	47.5%
11. Teacher exchange program	20	99	48.5%	16	56	40.3%	19	155	45.2%
15. Expanded students records	19	100	49.0%	20	40	28.8%	20	140	40.8%

a - Includes the five activities receiving highest number of "Strongly Agree" and "Agree" responses within each respondent group.

b - Includes the five activities receiving lowest number of "Strongly Agree" and "Agree" responses within each respondent group.

An observable difference between the secondary and postsecondary responses is that Item #5 - "Exchange curriculum guides" was ranked 6th by the postsecondary respondents and Item #9 - "Student transfer guides between schools" was ranked as the 5th most agreed upon item by the postsecondary group to improve articulation. However, a Spearman's rank-order correlation coefficient indicated a significant relationship existed between the ranks of all the items computed from the "Strongly Agree" and "Agree" responses for the secondary and postsecondary respondents (.768 = $\underline{p} < .01$).

SECTION I: PRIORITIZING

Activities Identified as Highest Priority for Development of a Program To Improve K-14 Articulation

The items on "Section I: Prioritizing" were the same as those presented on "Section I: Agreement/Disagreement", but the instruction to the respondents on the "Prioritizing" activity was to circle 5 of the 20 activities that should receive highest priority in the development of a program to improve K-14 articulation in the Metro Nashville Community (see Table 3). Although all the respondents did not mark the "Prioritizing" section of the survey (N=231 instead of N=343), Items #1, #2, #3, and #12 emerged, as occurred on the "Agreement/Disagreement" section, as the top 4 items seen as being most effective for development of a program between secondary and postsecondary institutions. A Spearman's rank order correlation coefficient analysis indicated a significant relationship existed between the ranks given to the items by the secondary and postsecondary respondents (.792 = $\underline{p} < .01$).

It is important for educators planning future articulation activities to note that three items receiving the lowest priority on both parts of Section I were Item #15 - "Expanded student records", Item #14 - "Jointly developed student/parent guides", and Item #19 - "Joint program craft advisory committees". Apparently, these three activities would receive weak support from the respondent groups.

Table 3

ACTIVITIES IDENTIFIED AS

HIGHEST PRIORITY FOR DEVELOPMENT OF A PROGRAM BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

TO IMPROVE K-14 CAREER AND VOCATIONAL EDUCATION ARTICULATION IN THE METRO NASHVILLE COMMUNITY

Section I-Prioritizing

Respondents were asked to circle 5 of 20 activities that should receive highest priority

Activity	Secondary Respondents N=141*			Postsecondary Respondents N=90*			All Respondents N=231*		
	Rank	Freq.	% of N	Rank	Freq.	% of N	Rank	Freq.	% of N
2. Shared course descriptions and program requirements	1	87	61.7%	1	49	54.4%	1	136	58.9%
1. Joint Meetings with staff from other schools	3	75	53.2%	2	48	53.3%	2	123	53.3%
3. Coordinated program objectives	2	80	56.7%	4	33	36.7%	3	113	48.9%
12. Teacher visitations to other schools	4.5	57	40.4%	4	33	36.7%	4	90	39.0%
6. Jointly developed curriculum guides	4.5	57	40.4%	8	26	28.9%	5	83	35.9%
10. Joint institute career days	7	35	24.8%	6.5	27	30.0%	6	62	26.8%
17. Joint in-service programs	6	43	30.5%	12	15	16.7%	7	58	25.1%
9. Student transfer guides between schools	12	22	15.6%	4	33	36.7%	8	55	23.8%
20. Identified occupational role for each institution	10	26	18.4%	6.5	27	30.0%	9	53	22.9%

Activity	Secondary Respondents N=141*			Postsecondary Respondents N=90*			All Respondents N=231*		
	Rank	Freq.	% of N	Rank	Freq.	% of N	Rank	Freq.	% of N
5. Exchanged Curriculum guides	8	33	23.4%	10.5	19	21.1%	10	52	22.5%
18. Joint administrative articulation meetings	11	23	16.3%	9	21	23.3%	11	44	19.1%
4. Coordinated student follow-up program	9	27	19.2%	15	12	13.3%	12	39	16.9%
16. Coordinated testing program	17.5	16	11.4%	10.5	19	21.1%	13	35	15.2%
11. Teacher exchange program	13	21	14.9%	14	13	14.4%	14	34	14.7%
13. K-14 curriculum committees	14	19	13.5%	16	11	12.2%	15	30	13.0%
7. General discussions of student placement	19	12	8.5%	13	14	15.6%	16.5	26	11.3%
8. Individual discussions of	15.5	18	12.8%	17	8	8.9%	16.5	26	11.3%
14. Jointly developed student/parent guides	15.5	18	12.8%	18	6	6.7%	18	24	10.4%
19. Joint program craft advisory committees	17.5	16	11.4%	19	5	5.6%	19	21	9.1%
15. Expanded student records	20	2	1.4%	20	2	2.2%	20	4	1.7%

26

b

40

41

a Includes the five activities receiving highest priority ratings

b Includes the five activities receiving lowest priority ratings

* Although there were 343 returned survey forms, only 231 respondents prioritized the activities

A discrepancy was found between the responses of the postsecondary counselors and the responses for the remaining five respondent groups (see Tables 2-S & 2-PS in Appendix C). Item #7 - "General discussions of student placement" was ranked 5th as a priority articulation item by the postsecondary counselors, whereas the results for all respondents revealed a ranking of 16th. Also, Item #18 - "Joint administrative articulation meetings" was ranked 4th by both the secondary and postsecondary administrator populations but was ranked only 18th by the secondary instructors. Apparently, administrators at both levels of instruction saw value in having joint administrative articulation meetings while the secondary instructors did not see them as being a high priority compared to the other activities.

SECTION II: AGREEMENT/DISAGREEMENT

Activities that Should be Initiated To Improve the Articulation Process

When respondents were asked what activities should be initiated to improve the articulation process, the secondary respondents chose the same items as all respondents to be ranked in the top four activities: (see Table 4)

Item #6 - Increased involvement of business and industry in vocational curriculum development
Item #5 - Joint development and sharing of labor market data for program planning
Item #3 - Secondary/postsecondary cooperative approach to develop sequential curriculum in occupational programs that can be directly linked
Item #4 - Standardized course objectives and identified competencies for those secondary/postsecondary programs that can be linked

The postsecondary respondents chose Item #1 - "Increased efforts to improve articulation among all K-14 vocational delivery systems" as their 2nd ranked item, and placed Item #4 in a tie for the 6th position. Even so, a Spearman's rank-order correlation coefficient gave strong evidence that a significant relationship existed between the ranks assigned by the secondary and postsecondary respondents to the items on which they expressed "Strongly Agree" or "Agree" responses (.955 = $p < .01$).

Table 4

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: ACTIVITIES THAT SHOULD BE INITIATED TO IMPROVE THE ARTICULATION PROCESS

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section II

Results of "Strongly Agree" and "Agree" Responses

Activity	Secondary Respondents N=204			Postsecondary Respondents N=139			All Respondents N=343		
	Rank	Freq.	% of N	Rank	Freq.	% of N	Rank	Freq.	% of N
6. Increased involvement of business and industry in vocational curriculum development	1	194	95.1%	1	128	92.1%	1	322	93.9%
5. Joint development and sharing of labor market data for program planning	2	188	92.2%	3	110	79.1%	2	298	86.9%
3. Secondary/postsecondary cooperative approach to develop sequential curriculum in occupational programs that can be directly linked	4	181	88.7%	4	109	78.4%	3	290	84.6%
4. Standardized course objectives and identified competencies for those secondary/post-secondary programs that can be linked	3	185	90.7	6.5	102	73.4%	4	287	83.7%
1. Increased efforts to improve articulation among all K-14 vocational delivery systems	6.5	172	84.3%	2	111	79.9%	5	283	82.5%

Results of "Strongly Agree" and "Agree Responses

Activity	Secondary Respondents N=204			Postsecondary Respondents N=139			All Respondents N=343		
	Rank	Freq.	% of N	Rank	Freq.	% of N	Rank	Freq.	% of N
10. Joint development of guidelines for appropriate placement and credit between secondary/ postsecondary	6.5	172	84.3%	6.5	102	73.4%	6	274	79.9%
11. Secondary/postsecondary joint development of competency or skill measurement criteria for recognition of occupational proficiencies	8	165	80.9%	5	106	76.3%	7	271	79.0%
9. Increase involvement and planning with agencies such as METRA, Labor, Manpower Advisory Comm., Private Industry Council, Chamber of Commerce, Employment Security, etc.	5	174	85.3%	8	94	67.6%	8	268	78.1%
8. Joint secondary/postsecondary inservice planning and staff development workshops	9.5	155	76.0%	9	88	63.3%	9	243	70.9%
12. Single local advisory committee common to secondary postsecondary content areas that can be linked	9.5	155	76.0%	12	58	41.7%	10	213	62.1%
7. Formal communication and sharing between public delivery systems and propriety schools	11	128	62.8%	10	80	57.6%	11	208	60.6%

Results of "Strongly Agree" and "Agree" Responses

Activity	Secondary Respondents N=204			Postsecondary Respondents N=139			All Respondents N=343		
	Rank	Freq.	% of N	Rank	Freq.	% of N	**Rank**	**Freq.**	**% of N**
2. Shared facilities and staff, where feasible, among secondary and postsecondary programs	12	125	61.3%	11	75	54.0%	**12**	**200**	**58.3%**

a - Includes the four activities receiving highest number of "Strongly Agree" and "Agree" responses within each respondent group.

SECTION III: WHAT IS AND WHAT SHOULD BE

(Note: Although secondary and postsecondary respondents received different forms for responding to Section III, approximately one-third of the items on the two forms were assigned the same number and/or were worded the same.)

According to the results of opinions shown in Table 5, there were wide discrepancies found between the "What Is" and "What Should Be" regarding articulation efforts between the secondary and postsecondary institutions in the Metro Nashville area. Although caution should be exercised in interpreting tests by item, large differences were further evidenced in the fact that t tests for each of the population levels, secondary and postsecondary, revealed significant differences for all sets of items, "What Is" to "What Should Be", at the .001 level of significance (except Item #3 which was worded in the opposite direction from the other items).

To be especially noted are Items #1 and #4 which address "coordinating course content" and "program planning" between the postsecondary and secondary levels. Very few respondents indicated that there were observable efforts to coordinate course content and program planning (5% to 22%), but 60% to 70% of the respondents think that such efforts should be made. The majority of respondents also suggested that improvement should be made in "placement and follow-up systems" at both the secondary and postsecondary levels (see Table 5, Item #9).

Needs for improvement were strongly indicated by secondary respondents concerning "orientation of students to career awareness in the elementary school programs" (Item #5), "orientation of students to secondary vocational programs in the Middle School programs" (Item #6), "career counseling as a responsibility of the guidance counselors" (Item #7), "advanced placement credit at postsecondary institutions in the area" (Item #10), and "apprenticeship opportunities for secondary vocational students" (Item #12-paraphrased).

Postsecondary respondents seemed to have similar concerns since large discrepancies

Table 5

Scale:
1-almost never 4-frequently
2-occasionally 5-almost always
3-undecided

"WHAT IS" AND "WHAT SHOULD BE"

Section III

Results of "Frequently" and "Almost Always" Responses

Statement	Secondary Respondents N=204				Postsecondary Respondents N=139			
	What Is		What Should Be		What Is		What Should Be	
	Freq.	% of N	Freq.	% of N	Freq.	% of N	Freq.	% of N
1. Efforts are made to coordinate course content between my school (institution) and the public postsecondary (secondary) programs within the Metro Nashville area	22	**10.8%**	138	**67.7%**	5	**3.6%**	84	**60.4%**
2. Efforts are made to coordinate course content with private postsecondary (other postsecondary) programs within the Metro Nashville area	12	**5.9%**	104	**51.0%**	11	**7.9%**	76	**54.7%**
3. Overlap in similar curriculum materials presented at postsecondary (secondary) levels constitutes a problem for the secondary (postsecondary) vocational program(s) graduates ("Graduates" deleted on postsecondary form)	37	**18.1%**	16	**7.8%**	13	**9.4%**	6	**4.3%**
4. Closer cooperation and program planning between secondary and postsecondary schools would enhance occupational preparation and avoid any unnecessary duplication	19	**9.3%**	128	**62.8%**	12	**8.6%**	90	**64.8%**

Results of "Frequently" and "Almost Always" Responses

Statement	Secondary Respondents N=204				Postsecondary Respondents N=139			
	What Is		What Should Be		What Is		What Should Be	
	Freq.	% of N	Freq.	% of N	Freq.	% of N	Freq.	% of N
*5. Students are adequately oriented to career awareness in the elementary school programs in the Metro schools	13	6.4%	148	72.6%				
*6. Students are adequately oriented to secondary vocational program opportunities in the middle school programs in the Metro schools	27	13.2%	156	76.5%				
*7. Career counseling is included as a responsibility of the guidance counselors at our school	88	43.1%	169	82.8%				
*8. Career counseling is included as a responsibility of vocational instructors at our school	123	60.3%	150	73.5%				
Similar Items:								
*9. An adequate system of placement and followup for vocational graduates, either employment and/or postsecondary education exists in our school	67	32.8%	161	78.9%				
*9. Most students who have completed secondary vocational training are placed in appropriate courses compatible with their previous occupational selection					47	33.8%	89	64.0%
*10. Students completing vocational programs at the secondary level are eligible for advanced placement for credit at postsecondary institutions in our area	26	12.8%	134	65.7%				

Results of "Frequently" and "Almost Always" Responses

Statement	Secondary Respondents N=204				Postsecondary Respondents N=139			
	What Is		What Should Be		What Is		What Should Be	
	Freq.	% of N	Freq.	% of N	Freq.	% of N	Freq.	% of N
*6. Students with prior vocational training at the secondary level are eligible for advanced placement or credit based on demonstrated proficiency					39	**28.1%**	87	**62.6%**
*11. My school provides vocational graduates with adequate information concerning post-secondary vocational training available in our community	106	**52.0%**	166	**81.4%**				
* 7. My school provides secondary schools with adequate information concerning appropriate courses and ability placement in occupational fields					50	**36.0%**	102	**73.4%**
*12. Students who have completed vocational training at our school and want apprenticeship opportunity can receive advanced standing in the apprenticeship program	21	**10.3%**	134	**65.7%**				
* 8. Students who have completed vocational training at our school and want apprenticeship opportunity can receive advanced standing in the apprenticeship program					23	**16.6%**	58	**41.7%**
Different Items:								
* 5. Most basic skills required of students continuing occupational preparation at the postsecondary level have been adequately covered by secondary schools					17	**12.2%**	104	**74.8%**

Results of "Frequently" and "Almost Always" Responses

Statement	Secondary Respondents N=204				Postsecondary Respondents N=139			
	What Is		What Should Be		What Is		What Should Be	
	Freq.	% of N	Freq.	% of N	Freq.	% of N	Freq.	% of N
*10. High school vocational education graduates should be encouraged to enroll in post-secondary career programs as a means of continuing their education					36	25.9%	101	72.7%

* Secondary and postsecondary respondents received different forms for responding to Section III. Most items on Section III were the same or similar for the two groups; wording in parentheses is from postsecondary form. To facilitate comparisons of results, efforts were made to present items in sequence on Table 4 that were worded the same or similarly on the two forms.

appeared between the "What Is" and "What Should Be" responses concerning "eligibility for advanced placement of secondary level students" (Item #6 - paraphrased) and the "amount of information provided to secondary schools concerning appropriate courses and ability placement in occupational fields" (Item #7 - paraphrased). Of special note is the fact that Item #5 revealed that only 12% of the postsecondary respondents indicated that "Most basic skills required of students continuing occupational preparation at the postsecondary level have been adequately covered by secondary schools". Almost 75% of the postsecondary respondents indicated that "Frequently" or "Almost Always" these basic skills should be covered by secondary schools.

SECTION III: ACTIVITY PARTICIPATION

The low percentages shown in Table 6 reveal that both secondary and postsecondary respondents were not aware of very many articulation activities occurring in their schools or institutions. The highest percentage found for the secondary respondents (39.7%) had to do with "visitation programs occurring with postsecondary institutions offering vocational education" (Item #9 - paraphrased). "Sharing facilities and staff with postsecondary vocational programs" (Item #3) was the highest ranked activity (34.5%) that had been observed by the postsecondary respondents. According to the respondents, other activities had been occurring to even lesser degrees.

Although a review of Table 6 indicated, generally, a low level of awareness of participation in articulation activities by both secondary and postsecondary respondent groups, an analysis of Tables 5-S thru 5-PS in Appendix C showed that there was diversity, as might be expected, among the amounts of awareness of participation by the six subgroups. For example, Item #3 - "Sharing Facilities and Staff with Postsecondary Vocational Programs" was an activity known to occur by only 6.9% of the secondary

Table 6

ACTIVITY PARTICIPATION

Section III

Activities in which respondent's school or staff participated within last two years

Activity	Secondary Respondents N=204			Postsecondary Respondents N=139		
	Frequency	% of N	Rank	Frequency	% of N	Rank
1. Staff development workshops with post-secondary vocational personnel	50	24.5%	3	44	31.7%	2
2. Sharing facilities and staff with other secondary vocational programs	57	27.9%	2	24	17.3%	5.5
3. Sharing facilities and staff with post-secondary vocational programs	25	12.3%	6	48	34.5%	1
Working with postsecondary (secondary) vocational education personnel to develop the following:						
4. Course objectives and competencies	38	18.6%	4	11	7.9%	8
5. Sequential vocational education curriculum	35	17.2%	5	7	5.0%	9
6. Competency tests	16	7.8%	9	5	3.6%	10
Working with postsecondary vocational education personnel to develop the following:						
*7. Meeting with postsecondary vocational education personnel to plan articulation of secondary and postsecondary vocational education programs	20	9.8%	8			
**7. Credit transfer policies				41	29.5%	3

Activity	Secondary Respondents N=204			Postsecondary Respondents N=139		
	Frequency	% of N	Rank	Frequency	% of N	Rank
*8. Contracting with outside schools or agencies that provide specialized vocational training which your school cannot provide	22	10.8%	7			
**8. Course objectives and competencies				24	17.3%	5.5
*9. Visitation programs with postsecondary institutions offering vocational education	81	39.7%	1			
**9. Competency tests				16	11.5%	7
**10. Meeting with secondary vocational education personnel to plan articulation of secondary and postsecondary vocational education programs				26	18.7%	4

* Item appeared only on secondary respondents survey form

** Item appeared only on postsecondary respondents survey form

counselors but by 66.7% of the postsecondary counselors. In Item #1 - "Staff Development Workshops with Postsecondary Vocational Personnel", the postsecondary counselors again reported a 66.7% participation rate, whereas the two other postsecondary groups reported a participation rate of 28.4% for the instructors and 35.5% for the administrators.

Item #9 on the secondary respondent survey form, "Visitation Programs With Postsecondary Institutions Offering Vocational Education", also yielded differences in levels of known participation; counselors and administrators reported a participation rate of 55.2% and 67.9%, respectively, whereas only 31.3% of the secondary instructors reported awareness of staff participation in the activity. Otherwise, of the 9 items in this portion of Section III, only Item #7 - "Credit Transfer Policies" on the postsecondary form showed dissimilar levels of participation. Only 22.6% of the postsecondary instructors were aware of the development of credit transfer policies with other postsecondary personnel whereas 50.0% of the counselors and 48.4% of the administrators reported awareness of the activity.

SECTION III: QUESTIONS — "YES", "NO", OR "NO OPINION"

In Table 7, the reader can observe that the majority of both secondary and postsecondary respondents responded affirmatively when asked the question concerning whether "occupational education should be taught at the secondary level" (Item #1). Note that the question for the secondary and postsecondary respondents was worded in the opposite direction, therefore, the majority of the responses being "Yes" for the secondary population (95.6%) and "No" for the postsecondary population (61.9%) indicated the same direction, although not the same magnitude, of opinion.

Both levels of respondents tended to agree that "It is realistic to design secondary vocational programs to prepare students to continue in their specialty at the post-

Table 7

ROLES OF SECONDARY AND POSTSECONDARY EDUCATION

Section III

Questions	Secondary Respondents N=204 Frequency and (% of N)			Postsecondary Respondents N=139 Frequency and (% of N)		
	Yes	No	No Opinion	Yes	No	No Opinion
1. Considering the trend towards longer formal education for all students, do you feel that occupational education should be taught at the secondary level?	195(95.6%)	6(2.8%)	2(1.0%)			
If yes, do you feel that basic occupational education should begin at the secondary level and progress to advance occupational training in the postsecondary school years?	184(90.2%)	9(4.4%)	7(3.4%)			
1. Considering the trend towards longer formal education for all students, do you feel that all occupational education should be concentrated in the postsedondary school years?				46(33.1%)	86(61.9%)	4(2.9%)
If Yes, do you feel that high schools should teach only the basic liberal arts subjects, career exploratory or pre-vocational types of curricula?				40(28.8%)	17(12.2%)	5(3.6%)

Questions	Secondary Respondents N=204 Frequency and (% of N)			Postsecondary Respondents N=139 Frequency and (% of N)		
	Yes	No	No Opinion	Yes	No	No Opinion
*2. Do you feel it is realistic to design secondary vocational programs to prepare students to continue in their speciality at the postsecondary level as well as to immediately enter the labor force?	183(89.7%)	16(7.8%)	4(2.0%)			
*3. Do you feel it is realistic to design secondary vocational programs to prepare students to continue in their specialty at the postsecondary level as well as to immediately enter the labor force?				93(66.9%)	31(22.3%)	9(6.5%)
*2. Do you feel it is realistic to design secondary vocational programs in extended time periods (2 & 3 hour blocks) for in-depth concentration of curricula?				87(62.6%)	28(20.1%)	20(14.4%)
*3. Do you feel it is realistic to design secondary vocational programs in extended time periods (2 & 3 hour blocks) for in-depth concentration of curricula?	155(76.0%)	37(18.1%)	8(3.9%)			
4. Do you feel high school vocational programs in our area provide the occupational preparation needed by a student to successfully continue in the postsecondary occupational program?	155(76.0%)	30(14.7%)	14(6.9%)	43(30.9%)	60(43.2%)	31(22.3%)
5. Do you feel there is unnecessary overlap and duplication in the vocational curriculum at secondary and postsecondary levels?	65(31.9%)	92(45.1%)	40(19.6%)	38(27.3%)	72(51.8%)	24(17.3%)

Questions	Secondary Respondents N=204 Frequency and (% of N)			Postsecondary Respondents N=139 Frequency and (% of N)		
	Yes	No	No Opinion	Yes	No	No Opinion
6. Do you feel the high school vocational education graduate is competing for the same job as the postsecondary vocational graduate most of the time?	105(51.5%	71(34.8%)	21(10.3%)	36(25.9%)	90(64.8%)	9(6.5%)

* Secondary and postsecondary respondents received different forms for responding to Section III.

secondary level as well as to immediately enter the labor force" (Item #2 for secondary form, Item #3 for postsecondary form). As to the question of whether "It is realistic to design secondary vocational programs in extended time periods (2 and 3 hour blocks)", both secondary and postsecondary respondents gave more "Yes" responses than "No" or "No Opinion" responses (Item #3 [76% responded "yes"] and Item #2 [63% responded "yes"], respectively).

The responses to Item #5 showed mixed reactions by both levels of personnel when asked their opinions about whether "there is unnecessary overlap and duplication in the vocational curriculum at secondary and postsecondary levels". Only 45% of the secondary respondents and 52% of the postsecondary respondents said "No". Almost 20% of the secondary respondents and 17% of the postsecondary respondents had "No Opinion".

The six groups of respondents generally agreed on the responses to the "Questions" portion of Section III as seen in Tables 6-SA thru 6-PC in Appendix C. The exceptions to this statement occurred in the results for the counselors. In Item #4 - "Do you feel high school vocational programs in our area provide the occupational preparation needed by a student to successfully continue in the postsecondary occupational program?", only 48% of the secondary counselors marked "Yes" versus 79% of the secondary instructors and 89% of the secondary administrators marked "Yes". To be noted is the fact that 24% of the counselors marked the "No Opinion" choice.

The postsecondary counselors were deviant from the remaining postsecondary groups on Item #2 - "Do you feel it is realistic to design secondary vocational programs in extended time periods (2 and 3 hour blocks) for in-depth concentration of curricula?". The "Yes" response was marked by only 33% of the counselors compared to 64% for the instructors and 65% for the administrators. On two other items, Item #5 - "Do you feel there is unnecessary overlap and duplication in the vocational curriculum at the secondary and postsecondary levels?" and Item #6 - "Do you feel the high school

vocational education graduate is competing for the same job as the postsecondary vocational graduate most of the time?", 50% of the postsecondary counselors marked "Yes" for each of the two items, whereas the postsecondary instructors and administrators gave "Yes" responses between the 26% and 29% levels for the two items.

ADDITIONAL COMMENTS

Total number and percent of 204 secondary and 139 postsecondary respondents who contributed comments:

SECONDARY		POSTSECONDARY	
Administrators	9	Administrators	11
Instructors	62	Instructors	39
Counselors	6	Counselors	1
TOTAL	77(37.7%)	TOTAL	51(36.7%)

Secondary Respondents
(Presented in descending order of frequencies)

Vocational programs in 2 & 3 hour blocks of time (N=23)

A frequency count of the comments contributed by the secondary respondents indicated that certain administrators, instructors, and counselors consider the scheduling of vocational programs in extended time periods (2 and 3 hour blocks) to be of high interest. However, the results were mixed with 4 of the respondents stating that 2 hour blocks were acceptable or desirable while 6 respondents reported that 2 hour blocks were too long to be acceptable. Only 2 respondents expressed anything positive about 3 hour blocks of time. Conversely, 11 respondents were adamently opposed to programs involving 3 hour blocks of time.

Impossible scheduling was the most frequently given reason for programs involving 2 and 3 hour blocks of time being unacceptable. A few instructors suggested that the nature of the program should determine whether extended blocks of time are an appropriate design for a program. An instructor stated that the teacher should have the prerogative of deciding the length of a class. A cosmetology instructor expressed

a need to extend the program to 5 or 6 hour blocks.

Program effectiveness and instructional level (N=17)

Administrators, instructors, and counselors mentioned that the quality of instruction should be improved. Some respondents pointed out that occupational education should begin in the middle and junior high levels of school; others stated that secondary programs should concentrate on orientation and exploration. However, the majority of the 17 respondents emphasized that vocational programs should deal with "The basics first" and that advanced levels of vocational programs should be available to juniors and seniors only. Also, offering a quality program in fewer schools rather than offering the same program in every school was recommended.

Student eligibility for vocational programs (N=11)

"Students should be screened and counseled before admittance to most vocational programs" was the essence of statements made by 11 of the secondary respondents. Several pointed out that counseling should begin in the elementary and middle school years and that only students who meet certain standards in language arts and mathematics, maturity, and interest should be allowed to participate in vocational programs. Such remarks were made by administrators, instructors, and counselors.

Articulation Implementation (N=7)

Some instructors were concerned about the articulation concept. Specifically, five instructors emphasized that the development of an identical curriculum within a program should not be attempted. The adoption of overall goals was considered to be acceptable but flexibility of curriculum was considered to be more desirable. Conversely, there were 2 instructors who pointed out a strong need for both horizontal and vertical articulation.

Miscellaneous

Comments contributed in addition to those discussed above are paraphrased and

shown with the frequency count for each type as follows:

	Comment	Frequency
a.	Conducting this survey is a positive step that should lead to action.	3
	This survey is too long and complicated and a waste of time and money.	2
b.	Facilities need updating if programs are to be delivered effectively.	3
c.	Overlap in curriculum content with post-secondary institutions is desirable; reen-forcement is good.	2
	Overlap in curriculum content with post-secondary institutions is undesirable; creates dropouts at postsecondary level.	1
d.	Class load is too heavy; is currently 30 to 35 members, should be no more than 12 to 20 members (depending upon program).	2
e.	Local industry should be involved in cur-riculum and should establish needs.	2
f.	Work programs are needed as extensions of most vocational programs	2
g.	Administrators need to be more effective in supplying means for course development.	1
h.	All cosmetology classes should be on the lower floors of buildings.	1
i.	Teachers should be required to pass compe-tency tests in their subject area at the journeyman level of ability.	1

Postsecondary Respondents
(Presented in descending order of frequencies)

"The Basics" at the Secondary Level (N=18)

According to the number of comments, the major articulation concern of the postsecondary administrators, instructors, and counselors was the need for students at the secondary level to receive a sufficient background in "The Basics". The specific skills mentioned and the number of times each was mentioned by the respondents were

as follows: a. Reading/English (N=8), b. Mathematics (N=8), c. Writing (N=6), d. Sciences (N=3), e. Speech (N=1), f. Problem analysis (N=2), g. Solution technique (N=1), h. General basic skills (N=3). Most of the remarks concerning the basics were accompanied by strongly worded explanations of the need for secondary graduates to be able to deal successfully with basic skills even if they were weak in occupational skills.

Additional Suggestions for secondary programs (N=15)

The importance of early exposure to occupational awareness and career options was mentioned by 5 survey participants along with the suggestion that exploratory courses be required beginning in the 9th grade. According to 2 respondents, secondary vocational programs should be offered to 11th and 12th graders, only, and the majority of vocational education should occur at the postsecondary level. The need for students to have a sufficiently intensive secondary vocational program experience was mentioned by 2 respondents with the explanation being that students should be able to enter the postsecondary institutions at an advanced level.

There were 3 respondents who emphasized that more science and math should be prerequisites for many vocational programs while 1 respondent suggested that only students with little ability should be allowed to take vocational courses. An administrator emphasized the need for secondary programs to prevent dropouts and an instructor suggested that a Junior Certification be provided to successful completers of phases of secondary programs in order to heighten motivation.

Secondary Vocational Programs in 2 & 3 hour blocks of time (N=7)

As found on the results for the secondary respondents, the postsecondary populations found 2 hour blocks of time more acceptable than 3 hour blocks of time. For example, 2 postsecondary participants made the comment that 2 hour blocks were desirable and 2 respondents pointed out that 2 hour blocks were undesirable. There were 4 postsecondary participants saying that 3 hour blocks of time were unrealistic at the

secondary level (impossible to schedule). However, one respondent made the statement that a person cannot become a good mechanic in 2 hour blocks of time.

Miscellaneous Comments

	Comments	Frequency
a.	Vertical articulation is important and should be implemented.	2
	Vertical articulation would be difficult since many students entering the post-secondary level are not recent graduates from the secondary level.	2
b.	Overlap of the secondary and postsecondary curricula is not a problem and should be encouraged.	2
c.	Certain sections of this survey form are difficult to complete due to the design of the form.	1
d.	Improved ethical practices are needed concerning teacher certification and hiring in Metro schools.	1
e.	Articulation among the postsecondary personnel exists informally although not on paper.	1

Readers and users of the comments presented above are cautioned to not give an inappropriate amount of weight to the "Additional Comments" section of this report, contributed by 128 respondents, compared to the item results for the 343 respondents on the other sections of the questionnaire. For example, the secondary respondents contributed the highest number of comments about the 2 and 3 hour blocks of time for classes but 76% of the population marked the "yes" choice on the survey item which asked if it is realistic to design secondary vocational programs in extended time periods (2 and 3 hour blocks) for in-depth concentration of curricula. Although comments offer special insights into a segment of a population's opinions, such expressions sometimes reflect differently than the opinions indicated on the remainder of the questionnaire.

CONCLUSIONS AND DISCUSSION

SURVEY SUMMARY

Analyses of the results of the "Vocational Education Needs Assessment Questionnaire" gave some clear answers to the questions identified in the introduction of this report concerning the local articulation situation. To answer the question, "Is there a need for articulation?", responses from the secondary and postsecondary respondents gave strong indication that numerous articulation activities should be initiated. As to the second question, "What kind of articulation activities are currently taking place?", a scanning of a section of the survey on activity participation revealed that only a minority of the respondents thought that their school or staff participated in most of the listed activities.

"What direction should we go in the future?" was considered by project staff and advisors to be the focal point for the report presentation. Items that emerged to the top as being activities that should be initiated according to the respondents' "Strongly Agree" or "Agree" responses were:

* Increased involvement of business and industry in vocational curriculum development
* Joint development and sharing of labor market data for program planning
* Secondary/postsecondary cooperative approach to develop sequential curriculum in occupational programs that can be directly linked
* Standardized course objectives and identified competencies for those secondary/postsecondary programs that can be linked

Other types of items that emerged to the top which were "Strongly Agreed" or "Agreed" upon by the largest frequency of the 343 respondents as suggested methods that would be most effective toward improving articulation were:

* Teacher visitations to other schools
* Shared course descriptions and program requirements

* Joint meetings with staff from other schools
* Coordinated program objectives

The four items listed above were the top ranked items by both the secondary and postsecondary respondents.

The secondary respondents indicated a high concern for adequate counseling and career awareness programs for the secondary students. For example, from 73% to 83% of the secondary population reported that "Frequently" or "Almost always" career counseling should be included as the responsibility of a) the counselors, and b) of the vocational instructors, and that students should be adequately oriented 1) to career awareness in the elementary schools, 2) to secondary vocational program opportunities in the middle school programs, and 3) to postsecondary vocational training in the secondary schools. Secondary respondents were also highly concerned about there being an adequate system of placement and follow-up in their respective schools for vocational graduates entering the work force or postsecondary education.

According to the comments made by some of the secondary respondents, there were concerns about the extended time periods for programs involving 2 and 3 hour blocks of time. Most of the respondents who expressed comments thought that 2 hour blocks, but especially 3 hour blocks, created too many scheduling problems; such inflexibility caused many students to be unable to enroll in vocational classes in which they would have otherwise participated.

Also, a concern to the secondary administrators, instructors, and counselors was the quality of instruction and what should be taught at which level of instruction (Middle School, 11th, & 12th grade, etc.). The majority of the respondents who addressed program effectiveness and instructional level in their comments emphasized that vocational programs should deal with "The basics first" leaving advanced levels of vocational programs available only to 11th and 12th graders.

Likewise, the comments from the postsecondary respondents indicated that the top articulation concern was the need for students at the secondary level to receive a sufficient background in "The basics", whether the students were able to successfully perform occupational skills or not. The need for basic skills to be adequately covered at the secondary level was the item on the postsecondary survey which showed the greatest difference between the "What Is" and "What Should Be" columns (12% and 75%, respectively). The review of the literature also revealed strong support for vocational education to not only reinforce the basic skills, but to offer basic skills courses when needed. In fact, some school systems now require students to earn credits in applied basic skills offered through vocational classes, shops, and labs (Bottoms, 1984b; Hunter, 1985; Kadamus, 1984).

The survey results also revealed that over 60% of the postsecondary respondents thought that students with prior vocational training at the secondary level should be eligible for advanced placement or credit based on demonstrated proficiency. Providing secondary schools with adequate information concerning appropriate information about postsecondary programs and encouraging secondary vocational graduates to enroll in postsecondary career programs were two other top concerns of the postsecondary respondents. Additional concerns of the group were similar to the secondary population in that occupational awareness and career options programs should be provided in the early and middle grades of school and that exploratory courses should be required beginning in the 9th grade.

RECOMMENDATIONS

The Director of the Department of Vocational, Adult, and Community Education of Metro Nashville Public Schools should take the responsibility of initiating the recommendations presented below. The responsibility for implementation of the recommended activities and programs may shift to other personnel and/or institutions after recommended task forces are formed. However, the outcomes of the recommendations shall remain the responsibility of the Director of Metro Schools' Vocational Department.

Recommendation #1

Gain commitment from secondary and postsecondary key personnel to engage in articulation activities.

Recommendation #2

Form a task force to determine:

a) priority order of articulation activities to be implemented (considering results of Vocational Needs Assessment Questionnaire).

b) time lines for the stages of implementation.

c) key personnel to lead and/or be involved in the articulation activities.

d) other tasks and decisions necessary to develop successful articulation programs between secondary and postsecondary institutions.

Recommendation #3

Form a task force to implement and/or monitor determined articulation activities between secondary and postsecondary institutions. Membership should be the same

Recommendation #3 continued:

or overlap with the task force appointed to determine articulation activities and functioning as described in Recommendation #2.

Based on the results of the Vocational Needs Assesssment Questionnaire and the literature review, the following recommendations should be initiated by a task force or the Director of Vocational Education of Metro Nashville Public Schools.

(NOTE: Information in parentheses refers to the Section and Item Number on the Vocational Needs Assessment Questionnaire. These items emerged as top priority items by both secondary and postsecondary respondents unless otherwise indicated. Wording of certain items is revised and expanded.)

Recommendation #4

Establish a systematic process for the following to occur between and involving secondary and postsecondary personnel:

a) Teacher visitations to other schools (Section I, Item #12)

b) Shared course descriptions and program requirements (Section I, Item #2)

c) Joint meetings with staff from other schools and levels of institutions (Section I, Item #1)

d) Coordinated program objectives (Section I, Item #3)

e) Coordinated, sequential curriculum in occupational programs that can be directly linked (Section II, Item #3)

f) Coordinated, standardized course objectives and identified competencies for secondary/postsecondary programs that can be linked (Section II, Item #4)

Recommendation #5

Increase the involvement of business and industry in vocational curriculum development at secondary and postsecondary levels. (Section II, Item #6)

Recommendation #6

Share labor market data (between secondary and postsecondary levels), especially supply data, that may not be available from other sources. (Section II, Item #5)

Recommendation #7

Design appropriate inservice activities to implement articulation activities by making use of presentations of responses on the Metro Schools' Articulation Needs Assessment Questionnaire which show results by position (administrators, instructors, and counselors); some major differences in responses occurred on certain items according to the respondent group. Consider lowest ranked items as well as top ranked items of each respondent group to know which activities would be expected to receive least support by which group(s).

Recommendation #8

Establish career awareness/orientation programs in the elementary grades and continue with sequenced programming through middle school levels. Each student's materials relevant to the career decision-making process should follow the student from one level to the next level. The 7th and 8th grade career counseling course should include an orientation to secondary vocational program offerings as well as an emphasis on employability skills and aptitude/interest testing

(Section IIIa, Item #5-Secondary form)

(Section IIIa, Item #6-Postsecondary form)

Recommendation #9

In coordination with the Guidance Department, develop group and individual counseling programs at the secondary level which are the responsibility of both

Recommendation #9 continued:

vocational instructors and guidance counselors.

(Section IIIa, Items #7 & #8, Secondary form)

Recommendation #10

Provide adequate information at the secondary level re: postsecondary vocational training even if a linkage program is not offered at the secondary level. Postsecondary institutions should take the responsibility of supplying information on program offerings to the Director of Metro Schools' Vocational Programs.

(Section IIIa, Item #11-Secondary form)

(Section IIIa, Item #7-Postsecondary form)

Recommendation #11

Give primary consideration to the development of "Basic skills" and transferable skills within occupational job clusters at the secondary level. Core competencies for all secondary students should be identified in coordination with academic departments, postsecondary institutions, and business/industry. Certain vocational courses which call for the development of mathematics, science, etc., competencies should be upgraded to meet state and local standards for those competencies and be accepted for graduation requirements.

(Section IIIa, Item #5-Postsecondary form)

(Additional Comments Section)

Recommendation #12

Continue exploring the feasibility of and the alternatives for the secondary vocational programs which utilize extended time periods (2 and 3 hour blocks).

Recommendation #12 continued:

Where possible, revise time blocks to allow more flexibility in class scheduling which will permit more students to enter programs and/or change career directions.

(Section IIIc, Item #3-Secondary form)

(Section IIIc, Item #2-Postsecondary form)

Recommendation #13

Develop and forward summary profile data on completers of secondary programs which will enhance program/career articulation between students and postsecondary institutions.

Recommendation #14

Establish standards and agreements between secondary and postsecondary institutions whereby advanced placement and apprenticeship opportunities are available to qualified completers of secondary institutions at the postsecondary level. Certificates should be given to each student who completes course credits which identify the tasks, skills, and/or competencies that have been mastered.

(Section IIIa, Items #10 & #12-Secondary form)

(Section IIIa, Items #6 & #8-Postsecondary form)

Recommendation #15

Develop a system of placement and follow-up for vocational graduates entering the job market or postsecondary institutions. Seek funding from the Tennessee Board for Vocational Education for a placement coordinator/career specialist.

(Section IIIa, Item #9-Secondary and Postsecondary forms)

Recommendation #16

Annually evaluate the progress of the articulation activities identified as top priority activities by the task force described in Recommendation #2.

The articulation and coordination of public secondary and postsecondary vocational education has been identified by Lewis & Pratzner (1984) as an important area in which little research has been done to date. Even so, one thing that is well known about the articulation process is that many elements go into building a successful articulation program. Some educators who have had experiences with articulation programs report that everyone involved must be sincerely committed to the program, and all educational agencies involved in the project must sign formal agreements (Conn, 1984; Emerson & Free, 1984). Educators have also observed that teachers must receive in-service training and annual updating and that counselors and placement personnel must understand the articulation process and how it benefits students. In addition, students and their parents must be aware of the tremendous opportunity articulation affords them.

There should be no secondary-postsecondary conflict when it comes to the delivery of vocational-technical education. It seems that recent state and national reports, as well as statements by some well-known individuals, have given the impression that secondary and postsecondary vocational education systems duplicate programs and services. Galloway and Washburn (1985) have found that, to the contrary, the two systems appear to be building upon natural linkages among high schools, area vocational centers, and community colleges that serve diverse students and communities.

In The Unfinished Agenda (1984), the National Commission on Secondary Vocational Education claimed that excellence in education calls for close collaboration and planning across all educational levels. Articulation, to the Commission, meant not only establishing

close, working relations among elementary, secondary, and postsecondary schools but advocating strong, positive working relations within the secondary school itself. The Commission recommended that "Principals must provide for curriculum coordination across all academic and vocational education subject areas and throughout all educational levels" (p. 27).

Pleas for both horizontal and vertical articulation were made by the Carnegie Commission Members in their report on High School (Boyer, 1983): "While we recognize the integrity of the disciplines, we also believe their current state of splendid isolation gives students a narrow and even skewed vision of both knowledge and the realities of the world (p. 114) . . . Teachers must play a key role in making these connections between the disciplines. They must view the curriculum in a more coherent way. We cannot expect students to see relationships that teachers do not see. Teachers also should work together more collaboratively (p. 115) . . . Schooling should prepare all students for a life of work and learning. This means solid grounding in the basic skills, a common core of learning, a cluster of elective courses, and student assessment and counseling to smooth the transition to jobs and higher education (p. 118) . . . Clearly, if high schools are to offer advanced academic study and career exploration, they must recognize they cannot do it all. High schools must become 'connected' institutions, creating networks and specialty schools, drawing upon resources beyond the campus" (p. 129).

According to Emerson and Free (1984), articulation is not easy. It can be frustrating at times, "but it is ultimately worth every ounce of effort. The end results - the manuals, the profile sheets, the partnership that grows between secondary and postsecondary educators - make the effort worthwhile!" (p. 326b). To make it work, Galloway and Washburn (1985) state that educators at all levels must be willing to

transcend institutional self-interest in favor of the best interest of the student and the community.

In summary, Galloway and Washburn (1985) focused attention on the fact that those concerned about education must continually think in terms of the whole educational enterprise. Thus, students may move from one educational level to the next at their own pace, without unnecessary delay or duplication. For each in its own way, the secondary and postsecondary systems contribute to the delivery of invaluable vocational education to students of all ages.

REFERENCES

REFERENCES

Artis, M. Project MAVE. Model for Articulated Vocational Education. Springfield, Illinois: State Board of Education, Department of Adult, Vocational, and Technical Education, 1981. (ERIC Document Reproduction Service No. ED 226 164)

Bottoms, G. Excellence: not a myth, but a genuine need. VocEd: Journal of the American Vocational Association, 1984, 59 (5), 8-9. (a)

Bottoms, G. Now is the moment of opportunity. VocEd: Journal of the American Vocational Association, 1984, 59 (7), 8-9. (b)

Bottoms, G. Moving toward excellence. VocEd: Journal of the American Vocational Association, 1984, 59 (8), 10-11. (c)

Boyer, E. L. High school: A report on secondary education in America. The Carnegie Foundation for the Advancement of Teaching. New York: Harper & Row, 1983.

Campbell, P. B., Gardner, J. A., & Winterstein, P. Transition patterns between education and work. Columbus, Ohio: The National Center for Research in Vocational Education, Ohio State University, 1984.

Conn, G. J. Articulation is key to the future. VocEd: Journal of the American Vocational Association, 1984, 59 (6), 32c-32d.

Desy, J., Campbell, P. B., & Gardner, J. A. High school vocational education experiences: In school and in the labor market. Columbus, Ohio: The National Center for Research in Vocational Education, Ohio State University, 1984.

Dickerson, W. We need the area vo-techs more than ever. VocEd: Journal of the American Vocational Association, 1984, 59 (6), 17. (a)

Dickerson, W. Why articulate in public education? VocEd: Journal of the American Vocational Association, 1984, 59 (6), 32b. (b)

Emerson, N. & Free, E. Articulation: An exciting endeavor. VocEd: Journal of the American Vocational Association, 1984, 59 (6), 32a-32b.

Galloway, J. R., & Washburn, J. A joint secondary-postsecondary enterprise. VocEd: Journal of the American Vocational Association, 1985, 60 (1), 12-13.

High schools and the changing workplace. Washington, D.C.: National Academy Press, 1984.

Hunter, R. C. A school board sets its sights high. VocEd: Journal of the American Vocational Association, 1985, 60 (1), 38-39.

King, J. Pre-convention conferences focus on new directions and new skills. Update: Newspaper of the American Vocational Association, January/February 1985, p. 6.

Kolde, R. Articulation: a way to excel. VocEd: Journal of the American Vocational Association, 1984, 59 (6), 32d.

Lewis, M. V. & Pratzner, F. C. (Eds.). Perspectives on vocational education: Purposes and performance. Columbus, Ohio: The Natinal Center for Research in Vocational Education, Ohio State University, 1984.

Lindeman, A. Arizona: A reform in progress. VocEd: Journal of the American Vocational Association, 1985, 60 (1), 36-37.

Malone, E. W. A proposed model for improving articulation in vocational education between secondary schools and community college. Ft. Lauderdale, Florida: Nova University, 1976. (ERIC Document Reproduction Service No. ED 130 683)

Opachinch, C. A., & Linksz, J. J. A handbook for articulating high school and college career programs. Catonsville, Maryland: Catonsville Community College, 1974. (ERIC Document Reproduction Service No. ED 104 455)

Petry, J. R. An examination of the articulation process between secondary and post-secondary vocational programs in Tennessee. Nashville: Research Coordinating Unit, Tennessee Department of Education, 1978.

Pre-tech pilot program. VocEd: Journal of the American Vocational Association, 1985, 60 (1), 10.

Principles of technology field test. VocEd: Journal of the American Vocational Association, 1985, 60 (1), 10.

Smalley, S. F. Local Implementation of Performance-Based Curriculum. Final Report. Indianapolis, Indiana: Indiana State Board of Vocational and Technical Education, 1979. (ERIC Document Reproduction Service No. ED 189 295)

Stewart, B. Trade and industry articulation project: Final report, 1981-82. Norwalk, California: Cerritos Community College, 1982. (ERIC Document Reproduction Service No. ED 217 951)

Tennessee Task Force for Secondary Vocational Education. Tennessee Department of Education, 1983.

The Unfinished Agenda. Columbus, Ohio: The National Center for Research in Vocational Education, Ohio State University, 1984.

APPENDICES

APPENDIX A

Survey Form - "Vocational Education Needs Assessment Questionnaire"

METRO NASHVILLE/DAVIDSON COUNTY

VOCATIONAL EDUCATION NEEDS ASSESSMENT QUESTIONNAIRE

Please read carefully before completing the survey.

For our purposes, ARTICULATION means the planned process within the educational system which promotes the transition of students between the secondary and post-secondary levels of instruction and allows the student to move with continuity and minimum hindrance through each level.

1. Please complete and return the survey in the self-addressed envelope.
2. In responding to the items on the survey, base your answers on the vocational education programs with which your institution is presently involved. Do not attempt to generalize or speculate about the conditions of programs in other institutions.
3. If there are any questions concerning the survey, call Dan Covington at the following number: 615/832-2550.
4. Please mail the response card separately when you mail the completed survey.

The purpose of this questionnaire is to find out how you feel about the present status of K-14 articulation of career and vocational programs in our area and to assist in the identification of our articulation needs and priorities within Metropolitan Nashville and surrounding communities.

Demographic Data Sheet

Please circle the answer you feel best applies to each of the questions listed below.

Position (Please circle your response.)
1. Administrator
2. Instructor
3. Guidance Counselor

Type of Institution where you work (Please circle your response.)
Public:
1. Comprehensive High School
2. Secondary School (High School)
3. State Area Vocational Technical School
4. State Technical Institute
5. Community College
6. Other (please specify) _____

Private:
7. Secondary School (High School)
8. Vocational Technical School
9. Proprietary School
10. Junior College
11. Other (please specify) _____

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Vocational education area(s) covered in your education role (Please circle your response(s).
1. Occupational preparation
2. Career orientation
3. Career exploration
4. None
5. Other (please specify) _____

Program Area(s) with which you are involved (Please circle your response(s).
1. Agriculture
2. Distributive Education
3. Health Occupations Education
4. Home Economics
5. Office Occupations
6. Technical Education
7. Trade & Industrial Occupations
8. Special Programs
9. Other(s) (please specify) _____

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SECTION I: TO IDENTIFY PRIORITY REGARDING PROVEN ARTICULATION METHODS

Scale:
1--strongly agree
2--agree
3--disagree
4--strongly disagree
5--not sure

The following methods have been utilized to improve articulation between secondary and post-secondary institutions. Using the scale to the right, indicate your agreement regarding the suggested activities and their effectiveness.

___1. Joint meetings with staff from other schools
___2. Shared course descriptions and program requirements
___3. Coordinated program objectives
___4. Coordinated student follow-up program
___5. Exchanged curriculum guides
___6. Jointly developed curriculum guides
___7. General discussions of student placement
___8. Individual discussions of student placement
___9. Student transfer guides between schools
__10. Joint institute career days
___11. Teacher exchange program
___12. Teacher visitations to other schools
___13. K-14 curriculum committees
___14. Jointly developed student/parent guides
___15. Expanded students records
___16. Coordinated testing program
___17. Joint in-service programs
___18. Joint administrative articulation meetings
___19. Joint program craft advisory committees
___20. Identified occupational role for each institution

Circle the number of the 5 activities listed above that you feel should have the highest priority in development of a program to improve K-14 Career and Vocational Education articulation in the Metro Nashville community.

SECTION II: TO SURVEY OPINIONS REGARDING PROPOSED ARTICULATION ACTIVITIES.

Scale:
1--strongly agree
2--agree
3--disagree
4--strongly disagree
5--not sure

Using the scale to the right, please indicate your agreement or disagreement with each statement in terms of whether the activities should be initiated to improve the articulation process.

___1. Increased efforts to improve articulation among all K-14 vocational delivery systems
___2. Shared facilities and staff, where feasible, among secondary and post-secondary programs
___3. Secondary/post-secondary cooperative approach to develop sequential curriculum in occupational programs that can be directly linked
___4. Standardized course objectives and identified competencies for those secondary/post-secondary programs that can be linked
___5. Joint development and sharing of labor market data for program planning
___6. Increased involvement of business and industry in vocational curriculum development
___7. Formal communication and sharing between public delivery systems and propriety schools
___8. Joint secondary/post-secondary inservice planning and staff development workshops
___9. Increased involvement and planning with agencies such as METRA, Labor, Manpower Advisory Committee, Private Industry Council, Chamber of Commerce, Employment Security, etc.
__10. Joint development of guidelines for appropriate placement and credit between secondary/post-secondary
__11. Secondary/post-secondary joint development of competency or skill measurement criteria for recognition of occupational proficiencies
__12. Single local advisory committee common to secondary and post-secondary content areas that can be linked

SECTION III: SURVEY OPINIONS OF SECONDARY PERSONNEL

Scale:
1 - almost never 4 - frequently
2 - occasionally 5 - almost always
3 - undecided

Using the scale to the right, please evaluate each of the following statements in two ways: Your perception of "What Is" and your perception of "What Should Be"

What Is	What Should Be		What Is	What Should Be	
___	___	1. Efforts are made to coordinate course content between my school and the public post-secondary programs within the Metro Nashville area.	___	___	6. Students are adequately oriented to secondary vocational program opportunities in the middle school programs in the Metro Schools.
___	___	2. Efforts are made to coordinate course content with private post-secondary programs within the Metro Nashville area.	___	___	7. Career counseling is included as a responsibility of the guidance counselors at our school.
___	___	3. Overlap in similar curriculum materials presented at post-secondary levels constitutes a problem for the secondary vocational program graduates.	___	___	8. Career counseling is included as a responsibility of vocational instructors at our school.
___	___	4. Closer cooperation and program planning between secondary and post-secondary schools would enhance occupation preparation and avoid any unnecessary duplication.	___	___	9. An adequate system of placement and followup for vocational graduates, either employment and/or post-secondary education, exists in our school.
___	___	5. Students are adequately oriented to career awareness in the elementary school programs in the Metro Schools.	___	___	10. Students completing vocational programs at the secondary level are eligible for advanced placement or credit at post-secondary institutions in our area.
			___	___	11. My school provides vocational graduates with adequate information concerning post-secondary vocational training available in our community.
			___	___	12. Students who have completed vocational training at our school and want apprenticeship opportunity can receive advanced standing in the apprenticeship program.

Please circle any activities in which your school or staff have participated within the last two years.

1. Staff development workshops with post-secondary vocational personnel
2. Sharing facilities and staff with other secondary vocational programs
3. Sharing facilities and staff with post-secondary vocational programs

Working with post-secondary vocational education personnel to develop the following:

4. Course objectives and competencies
5. Sequential vocational education curriculum
6. Competency tests
7. Meeting with post-secondary vocational education personnel to plan articulation of secondary and post-secondary vocational education programs
8. Contracting with outside schools or agencies that provide specialized vocational training which your school cannot provide
9. Visitation programs with post-secondary institutions offering vocational education

SECTION III: SURVEY OPINIONS OF SECONDARY PERSONNEL continued:

Please answer the following questions by marking Yes, No, or No Opinion. If you wish to qualify a Yes or No answer, use the space provided.

(1) Considering the trend towards longer formal education for all students, do you feel that occupational education should be taught at the secondary level? Yes ___ No ___ No Opinion ___

If Yes, do you feel that basic occupational education should begin at the secondary level and progress to advance occupational training in the post-secondary school years? Yes ___ No ___ No Opinion ___

(2) Do you feel it is realistic to design secondary vocational programs to prepare students to continue in their speciality at the post-secondary level as well as to immediately enter the labor force? Yes ___ No ___ No Opinion ___

(3) Do you feel it is realistic to design secondary vocational programs in extended time periods (2 & 3 hour blocks) for indepth concentration of curricula? Yes ___ No ___ No Opinion ___

(4) Do you feel high school vocational programs in our area provide the occupational preparation needed by a student to successfully continue in the post-secondary occupational program? Yes ___ No ___ No Opinion ___

(5) Do you feel there is unnecessary overlap and duplication in the vocational curriculum at secondary and post-secondary levels. Yes ___ No ___ No Opinion ___

(6) Do you feel the high school vocational education graduate is competing for the same job as the post-secondary vocational graduate most of the time? Yes ___ No ___ No Opinion ___

ADDITIONAL COMMENTS:

SECTION III: SURVEY OPINIONS OF POST-SECONDARY PERSONNEL

Using the scale to the right, please evaluate each of the following statements in two ways: Your perception of "What Is" and your perception of "What Should Be"

Scale:
1 - almost never
2 - occasionally
3 - undecided
4 - frequently
5 - almost always

What Is	What Should Be			What Is	What Should Be	
___	___	1.	Efforts are made to coordinate course content between my institution and the secondary programs within the area.	___	___	6. Students with prior vocational training at the secondary level are eligible for advanced placement or credit based on demonstrated proficiency.
___	___	2.	Efforts are made to coordinate course content with other post-secondary programs within the Metro Nashville area.	___	___	7. My school provides secondary schools with adequate information concerning appropriate courses and ability placement in occupational fields.
___	___	3.	Overlap in similar curriculum presented at secondary levels constitutes a problem for post-secondary vocational programs.	___	___	8. Students who have completed vocational training at our school and want apprenticeship opportunity can receive advanced standing in the apprenticeship program.
___	___	4.	Closer cooperation and program planning between post-secondary and secondary schools would enhance occupation preparation and avoid unnecessary duplication.	___	___	9. Most students who have completed secondary vocational training are placed in appropriate courses compatible with their previous occupational selection.
___	___	5.	Most basic skills required of students continuing occupational preparation at the post-secondary level have been adequately covered by secondary schools.	___	___	10. High school vocational education graduates should be encouraged to enroll in post-secondary career programs as a means of continuing their education.

Please circle any activities in which your institution or staff have participated within the last two years.

1. Staff development workshop with secondary vocational education personnel
2. Sharing facilities and staff with secondary vocational programs
3. Sharing facilities and staff with other post-secondary vocational programs

Working with secondary vocational education personnel to develop the following:

4. Course objectives and competencies
5. Sequential vocational curriculum
6. Competency tests

Working with other post-secondary vocational education personnel to develop the following:

7. Credit transfer policies
8. Course objectives and competencies
9. Competency tests
10. Meeting with secondary vocational education personnel to plan articulation of secondary and post-secondary vocational education programs

Please answer the following questions by marking Yes, No, or No Opinion. If you wish to qualify a Yes or No answer, use the space provided.

(1) Considering the trend towards longer formal education for all students, do you feel that all occupational education should be concentrated in the post-secondary school years? Yes ___ No ___ No Opinion ___
If Yes, do you feel that high schools should teach only the basic liberal subjects career exploratory or pre-vocational types of curricula? Yes ___ No ___ No Opinion ___

(2) Do you feel it is realistic to design secondary vocational programs in extended time periods (2 & 3 hour blocks) for indepth concentration of curricula? Yes ___ No ___ No Opinion ___

(3) Do you feel it is realistic to design secondary vocational programs to prepare students to continue in their speciality at the post-secondary level as well as to immediately enter the labor force? Yes ___ No ___ No Opinion ___

(4) Do you feel high school vocational programs provide the occupational preparation needed by a student to successfully continue in post-secondary occupational programs? Yes ___ No ___ No Opinion ___

(5) Do you feel there is unnecessary overlap of curriculum at secondary and post-secondary levels? Yes ___ No ___ No Opinion ___

(6) Do you feel the high school vocational education graduate is competing for the same job as the post-secondary vocational graduate most of the time? Yes ___ No ___ No Opinion ___

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ADDITIONAL COMMENTS:

APPENDIX B

Correspondence

Metropolitan Public Schools
2601 BRANSFORD AVENUE
NASHVILLE, TENN. 37204

March 16, 1982

SAMPLE

Dr. Howard Lawrence, President
Nashville State Technical Institute
120 White Bridge Road
Nashville, Tennessee 37209

Dear Dr. Lawrence:

As you are aware, there is an ever increasing need for institutional and interagency coordination among all educational groups, both public and private. Current social and economic factors mandate that we should seek to ensure quality for all students in the Metropolitan community through an articulated delivery system.

Most articulation problems point to a lack of smooth student matriculation due to unsequenced programs, lack of content continuity, lack of resource coordination, lack of identified student competencies and misunderstanding due to poor communication. These problems do have an effect upon all persons involved in education and especially the vocational student's educational progress.

A first step in developing institutional and interagency coordination is to develop a process for formal input and communication among all agencies and institutions. The Metropolitan Public Schools propose to serve as the initiator of such an effort and our success will depend largely on your cooperation and support.

A formal organizational pattern can enhance coordination of programs and services among all levels of our vocational delivery system, and allow students to move with continuity and minimum hindrance through each level. Our goal is to work with you to provide a vocational delivery system that will allow optimum student development and program continuity from one learning enviornment to another regardless of whether these are public or private. In the very near future, Dan Covington and James Currie will be making personal contact to solicit your ideas concerning the means for formal open communication between our delivery systems.

Sincerely,

Charles O. Frazier

COF:dp

Metropolitan Public Schools
2601 BRANSFORD AVENUE
NASHVILLE, TENN. 37204

March 19, 1982

SAMPLE

Dr. Howard Lawrence, President
Nashville State Technical Institute
120 White Bridge Road
Nashville, Tennessee 37209

Dear Dr. Lawrence:

You recently received communication from the Director of Schools soliciting your support in our efforts to formalize an articulated organization pattern for coordination of program and services among all levels of our vocational delivery system in the Metro community.

We are proposing establishing an Articulation Roundtable to formalize communication, sharing and cooperation among agencies/institutions. The Roundtable will provide for communication of the different educational level points of view, identify present working articulation activities, barriers, future goals and objectives; determine local priorities and initiate implementation and expansion of articulation activities. The formation of such a Roundtable is extremely important in our efforts.

Please support our efforts by identifying a representative from your institution to participate in this activity.

I have enclosed a letter of response and will be contacting you immediately.

Sincerely,

Dan A. Covington, Project Director
Vocational Education Exemplary Project

DAC:dp

Enclosure

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Metropolitan Public Schools
2601 BRANSFORD AVENUE
NASHVILLE, TENN. 37204

September 9, 1982

MEMORANDUM

TO: Lucille Nabors
E. C. Miller

FROM: Dan A. Covington

RE: Articulation Needs & Strength Inventory

Enclosed is a rough draft of a survey to gain insights regarding articulation efforts in our community. Would you please react to the questions and provide input regarding other areas that should be considered?

The demographic data sheet, along with section I, II & III will be sent to all respondents. Section III is really two different surveys--one for Post-secondary "A" and one for Secondary "B". I will color code the survey based on these two populations.

Feel free to provide any comments you feel would improve the instrument. If you would, please make notations on the draft and return to me. I will revise and return a final draft for your approval/disapproval.

If you have questions, please call.

DAC/jd

Enclosure

Metropolitan Public Schools
2601 BRANSFORD AVENUE
NASHVILLE, TENN. 37204

September 9, 1982

MEMORANDUM

TO: Dr. Jim Lorenz

FROM: Dan Covington

RE: Articulation Needs & Strength Inventory

Enclosed is a rough draft of a survey to gain opinions regarding articulation efforts in our community. Would you please react to the questions and provide input regarding other areas that should be considered?

The demographic data sheet, along with section I, II & III will be sent to all respondents. Section III is really two different surveys--one for Post-secondary "A" and one for Secondary "B". I will color code the survey based on these two populations.

Feel free to provide any comments you feel would improve the instrument If you would, please make notations on the draft and return to me. I will revise and return a final draft for your approval/disapproval.

I will review this with you at our meeting on Wednesday, Sept. 15. Dr. Ed Binkley, Director of Research and Evaluation will be coming with me for our discussion and to meet you.

DAC/jd

Enclosure

cc: Dr. Ed Binkley

Metropolitan Public Schools

2601 BRANSFORD AVENUE • NASHVILLE, TENN. 37204

September 22, 1982

MEMORANDUM

TO: Dr. Jim Lorenz
Lucille Nabors
E. C. Miller
Ed Binkley

FROM: Dan A Covington Dan

Please review the second draft of our articulation survey. I appreciate the comments you have suggested and they have been included.

I anticipate the survey will be sent to no more than 500 respondents.

As mentioned previously, Section I & II will be sent to all respondents. Section III is really two different surveys--one for secondary and one for post-secondary. I will color code the survey based on these two populations.

Feel free to provide comments regarding format, appropriateness of questions, or any other suggestions, i.e. editing, for improving the instrument. Please make notations on the draft and return to me.

If you have questions, please call.

DAC/jd

Enclosure

Metropolitan Public Schools

2601 BRANSFORD AVENUE • NASHVILLE, TENN. 37204

January 17, 1983

MEMORANDUM

TO: Linda Argo, Pat Cole, Betty Gardner, Leroy Hollis, Jim Beard, Dorothy Pease and Tony Wilson

FROM: Dan A. Covington, Director
Vocational Education Exemplary Project

As you are aware, we are involved in a project that has as a major goal to provide continuity among our vocational programs in the Metro Schools and to open lines of communication between all institutions and agencies who provide post-secondary vocational education services. We also are soliciting input from business and industry to assist in program planning and employment projections. Our project is a massive undertaking.

Learning experiences encompass both horizontal movement between schools and programs and the vertical movement between grade levels and educational units. Most of the activities we are involved in are so designed to enhance this horizontal and vertical articulation (I hate that word) of programs.

There is a pressing need to work more closely with institutions who deliver similar vocational services on the post-secondary level. The Metro Schools Vocational Department has not initiated many linkage activities with these instituions mainly because of different governances and more pressing internal problems (court mandates). Some activities have been initiated by individual schools but little on a system-wide level.

I would like to determine what has been done and how people really feel about working together to provide a more uniform vocational delivery system in our community. Would you assist me in critiquing the attached instrument?

Keep this in mind. I would not solicit your opinions if I thought they were not needed and I will take whatever input you give and try to incorporate it in the instrument.

Your prompt reply is appreciated.

DC/jd

Enclosures

Please return this sheet and any other comments to:

Dan Covington--Vocational Education Exemplary Project

Crieve Hall School, Rt. 3

Articulation Needs and Strengths Inventory

(1) Does the survey address the real issues that would enhance effective articulation of programs on the secondary/post-secondary level?

(2) How long did it take for you to complete the instrument?

(3) Are there unnecessary questions?

(4) What about the survey format?

(5) Does anything need to be added/deleted?

(6) General opinion about the data requested.

Metropolitan Public Schools
2601 BRANSFORD AVENUE
NASHVILLE, TENN. 37204

June 21, 1983

SAMPLE

Ms. Pamela Darling, Manager
Helena Dye & Flanary Beauty College
1808 Eighth Avenue, South
Nashville, Tennessee 37203

Dear Ms. Darling:

Would you please provide me a listing of instructors you would like included in our articulation survey? I want to provide individual survey packets for those you indicate. I will bring them to your institution as a group. Would you also indicate the instructor's full name and title (Mr. or Ms.) so that we might address the letter to him/her individually.

As of this date, we have surveyed all Metro Schools vocational staff, administrators, and guidance personnel as well as numerous post-secondary institutions, public and private. We want a good return rate from all post-secondary institutions in programs that can be linked and solicit your help and encouragement to your staff to complete the information requested. A letter of encouragement from you would help ensure a good rate of return from Helena Dye & Flanary Beauty College.

This data analysis will provide the framework to initiate specific activities to improve linkages. Thanks for your support of our effort. You will receive a report once this information is analyzed.

Your prompt reply is appreciated.

Sincerely,

Dan Covington, Project Director
Vocational Education Exemplary Project

DC/jd

Enclosures

Metropolitan Public Schools

2601 BRANSFORD AVENUE
NASHVILLE, TENN. 37204

SAMPLE

The Metro Public Schools is involved in a project that has as one of its goals improved cooperation and coordination between institutions which deliver similar services in vocational education. The articulation process among secondary and post-secondary vocational education is a topic of great concern to educators. So that we might determine how respondents in both secondary and post-secondary vocational programs in the Metro Nashville area feel about working more closely together, our school system is soliciting your assistance in helping us secure this information.

Information obtained will provide a framework for the Metro Schools Vocational Department to initiate activities that will improve linkages with private and public post-secondary vocational delivery systems in our area. You will find attached a copy of persons and institutions involved in this data gathering process. We certainly appreciate your input and special assistance in this effort to improve communication and cooperation among all vocational education delivery systems in the Metro Nashville area.

The packet provided includes a survey, a response card and return envelope. It should not take you more than fifteen minutes to complete the information requested.

Please return the survey and your suggestions in the enclosed envelope. Also, please mail the response card separately as this will let us know you are participating while maintaining survey anonymity. Thank you for your cooperation.

Sincerely,

Dan A. Covington, Project Director
Vocational Education Exemplary Project

DAC/jd

Enclosures

Metro Schools Articulation Needs and Strengths Inventory

PURPOSE: TO ASSESS CURRENT RELATIONS BETWEEN SECONDARY AND POST-SECONDARY INSTITUTIONS, BOTH PUBLIC AND PRIVATE

Issues the survey attempts to address:
*Do participants in the institutions involved feel that there is a need for articulation?
*Do participants feel that both secondary and post-secondary have a role in occupational-technical education?
*Do participants feel that some duplication and overlap in programs exist?
*Identification of strategies and current efforts in articulating programs.
*Which of the two levels should be responsible for what type of occupational-technical training?
*When should occupational-technical training begin?

Questionnaire Respondents: Total--600

Administrators: (Public Secondary)	Metro Schools--Director's Office, Principals, Assistant Principals in charge of Curriculum, Vocational Program Assistants, Vocational Central Office Staff, Guidance Coordinator
(Public Post-Secondary)	NSTI--President, Dean of Instruction, Division Heads AVTS--Superintendent, Assistant Superintendent, Coordinator Volunteer State--President, Dean of Instruction, Coordinator Career Education
(Private Post-Secondary)	Nashville Auto Diesel College, Draughons Junior College, (METRA) (CETA), Nashville School of Broadcast Technique, Bureau of Apprenticeship and Training, National Institute of Technology, Lyle's Middle Tennessee School of Cosmetology, Inc., Nossi School of Art, The Harris School of Art, O'More School of Design, Control Data Learning Center, Watkins Institute, Excel Business Institute, Medical Career College, Helena Dye & Flanary Beauty College, Nashville College of Medical and Dental Assistants
Counselors:	Metro Schools, NSTI, AVTS, Vol State, Private systems
Instructors:	Metro Schools, NSTI, AVTS, Vol State, Private systems

Copy of Response Card
for
Vocational Education Needs Assessment Questionnaire

Name: _____

Institution: _____

Address: _____

Zip: _____ **Phone:** _____

☐ **Yes, I have received the survey and will support efforts to improve linkages and communication of all public and private secondary and post-secondary vocational programs in our area.**

I will return the survey immediately when it is completed.

Note: Mail this card separately: this will let us know you have received the information, are participating and to follow-up on nonrespondents.

Metropolitan Public Schools
2601 BRANSFORD AVENUE
NASHVILLE, TENN. 37204

May 23, 1983

SAMPLE

MEMORANDUM

TO:

FROM: Dan Covington

RE: Articulation Survey

If you have not already, I would appreciate your completing the survey that was sent to you.

The information will be used to identify priorities to improve linkages with post-secondary systems. You were included in the sample of over six hundred vocational educators, administrators and counselors. Your input is vital.

DC/jd

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Metropolitan Public Schools
2601 BRANSFORD AVENUE
NASHVILLE, TENN. 37204

SAMPLE

If you have not already, I would appreciate your completing the survey that was sent to you.

The information will be used to identify priorities to improve linkages with the Metro Schools and post-secondary institutions public and private. You were included in the sample of over six hundred vocational educators, administrators and counselors. Your input is vital.

Sincerely,

Dan Covington

Dan A. Covington, Project Director
Vocational Education Exemplary Project

DAC/jd

APPENDIX C

Tables - Responses by Level of Instruction and Position

Tables - Means and Standard Deviations

Table 1-SA

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: SUGGESTED METHODS AND THEIR EFFECTIVNESS TOWARD IMPROVING ARTICULATION

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section I-Agreement/Disagreement

Secondary Administrators
N=28

Activity Arranged according to rank of agreement statements	Rank of Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
2. Shared course descriptions and program requirements	1	14	14	28	100%	0	0	0	0%	1	4%
19. Joint program craft advisory committees	2	9	18	27	96%	1	0	1	4%	1	4%
1. Joint meetings with staff from other schools	5	11	15	26	93%	0	2	2	7%	1	4%
3. Coordinated program objectives	5	14	12	26	93%	1	2	3	11%	0	0%
5. Exchanged curriculum guides	5	11	15	26	93%	1	2	3	11%	0	0%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
18. Joint administrative articulation meetings	5	15	11	26	93%	1	0	1	4%	1	4%
12. Teacher visitations to other schools	8	10	15	25	89%	1	2	3	11%	0	0%
17. Joint in-service programs	8	9	16	25	89%	1	2	3	11%	1	4%
4. Coordinated student follow-up programs	10	11	13	24	86%	3	2	5	18%	0	0%
6. Jointly developed curriculum guides	10	14	10	24	86%	3	2	5	18%	0	0%
20. Identified occupational role for each institution	10	15	9	24	86%	1	0	1	4%	4	14%
7. General discussions of student placements	15	8	15	23	82%	3	2	5	18%	1	4%
10. Joint institute career days	15	10	13	23	82%	1	3	4	14%	1	4%
16. Coordinated testing program	15	6	17	23	82%	3	0	3	11%	2	7%
8. Individual discussions of student placement	17	9	12	21	75%	3	2	5	18%	2	7%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
9. Student transfer guides between schools	17	10	11	21	75%	2	2	4	14%	3	11%
14. Jointly developed student/parent guides	17	6	15	21	75%	5	2	7	25%	0	0%
15. Expanded students records	17	4	17	21	75%	4	2	6	21%	1	4%
13. K-14 curriculum committees	19	10	10	20	71%	3	3	6	21%	2	7%
11. Teacher exchange program	20	2	14	16	57%	2	4	6	21%	5	18%

Table 1-SI

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: SUGGESTED METHODS AND THEIR EFFECTIVNESS TOWARD IMPROVING ARTICULATION

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section I-Agreement/Disagreement

Secondary Instructors
N=147

Activity Arranged according to rank of agreement statements	Rank of Agreement Statemen's	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
3. Coordinated program objectives	1	51	78	129	88%	9	0	9	6%	4	3%
2. Shared course descriptions and program requirements	2	60	65	125	85%	10	1	11	8%	4	3%
12. Teacher visitations to other schools	3	66	58	124	84%	8	2	10	7%	7	5%
1. Joint meetings with staff from other schools	4	55	68	123	84%	7	2	9	6%	9	6%
5. Exchanged curriculum guides	5	45	72	117	80%	17	3	20	14%	5	3%
17. Joint in-service programs	6	51	60	111	76%	16	3	19	13%	11	8%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
4. Coordinated student follow-up program	7	32	75	107	73%	9	4	13	9%	21	14%
10. Joint institute career days	8	37	65	102	69%	17	5	22	15%	15	10%
7. General discussions of student placement	9	28	71	99	67%	19	9	28	19%	11	8%
20. Identified occupational role for each institution	10	37	61	98	67%	14	5	19	13%	23	16%
6. Jointly developed curriculum guides	12	47	49	96	65%	27	4	31	21%	12	8%
19. Joint program craft advisory committees	12	31	65	96	65%	19	5	24	16%	21	14%
18. Joint administrative articulation meetings	13	25	67	92	63%	20	8	28	19%	19	13%
8. Individual discussions of student placement	15	26	65	91	62%	25	4	29	20%	18	12%
9. Student transfer guides between schools	15	28	63	91	62%	16	4	20	14%	26	18%
13. K-14 curriculum committees	16	29	57	86	59%	25	8	33	23%	22	15%
16. Coordinated testing program	17	24	57	81	55%	29	7	36	25%	24	16%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
14. Jointly developed student/parent guides	18	25	51	76	52%	31	4	35	24%	29	20%
15. Expanded students records	19	14	54	68	46%	29	6	35	24%	37	25%
11. Teacher exchange program	20	22	42	64	44%	41	12	53	36%	24	16%

Table 1-SC

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: SUGGESTED METHODS AND THEIR EFFECTIVNESS TOWARD IMPROVING ARTICULATION

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section I-Agreement/Disagreement

Secondary Counselors
N=29

Activity Arranged according to rank of agreement statements	Rank of Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
2. Shared course descriptions and program requirements	1	10	16	26	90%	1	0	1	4%	0	0%
3. Coordinated program	3	10	15	25	86%	1	0	1	4%	0	0%
5. Exchanged curriculum	3	9	16	25	86%	1	0	1	4%	1	4%
12. Teacher visitations to other schools	3	11	14	25	86%	1	0	1	4%	1	4%
1. Joint meetings with staff from other schools	5	7	17	24	83%	0	0	0	0%	3	10%
4. Coordinated student follow-up program	6	8	15	23	79%	3	0	3	10%	1	4%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
7. General discussions of student placement	9	8	14	22	76%	3	1	4	14%	1	4%
8. Individual discussions of student placement	9	6	16	22	76%	2	0	2	7%	3	10%
10. Joint institute career days	9	11	11	22	76%	2	1	3	10%	2	7%
17. Joint in-service programs	9	7	15	22	76%	5	0	5	17%	0	0%
16. Coordinated testing programs	12	3	18	21	72%	3	1	4	14%	2	7%
18. Joint administrative articulation meetings	12	7	14	21	72%	3	1	4	14%	2	7%
13. K-14 curriculum committees	14	5	15	20	69%	5	0	5	17%	2	7%
19. Joint program craft advisory committees	14	4	16	20	69%	2	0	2	7%	5	17%
20. Identified occupational role for each institution	14	6	14	20	69%	5	0	5	17%	2	7%
9. Student transfer guides between schools	17	9	10	19	66%	3	0	3	10%	5	17%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
11. Teacher exchange program	17	4	15	19	66%	2	1	3	10%	5	17%
6. Jointly developed curriculum guides	19	8	9	17	59%	3	0	3	10%	7	24%
14. Jointly developed student/parent guides	19	4	13	17	59%	4	0	4	14%	6	21%
15. Expanded student records	20	2	9	11	38%	11	1	12	41%	4	14%

Table 1-PA

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: SUGGESTED METHODS AND THEIR EFFECTIVNESS TOWARD IMPROVING ARTICULATION

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section I-Agreement/Disagreement

Postsecondary Administrators
N=31

Activity Arranged according to rank of agreement statements	Rank of Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
12. Teacher visitations to other schools	1	16	14	30	97%	1	0	1	3%	0	0%
1. Joint meetings with staff from other schools	2	13	16	29	94%	2	0	2	7%	0	0%
2. Shared course descriptions and program requirements	3	15	11	26	84%	2	1	3	10%	2	7%
18. Joint administrative articulation meetings	4	9	16	25	81%	3	0	3	10%	3	10%
5. Exchanged curriculum guides	6	4	20	24	77%	3	0	3	10%	4	13%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
9. Student transfer guides between schools	6	8	16	24	77%	4	0	4	13%	3	10%
17. Joint in-service programs	6	7	17	24	77%	3	1	4	13%	3	10%
20. Identified occupational role for each institution	8	11	12	23	74%	4	0	4	13%	4	13%
3. Coordinated program objectives	10	8	14	22	71%	2	1	3	10%	6	19%
10. Joint institute career days	10	8	14	22	71%	3	0	3	10%	6	19%
4. Coordinated student follow-up program	11	10	10	20	65%	4	1	5	16%	6	19%
7. General discussions of student placement	12	7	12	19	61%	4	1	5	16%	6	19%
6. Jointly developed curriculum guides	13	5	13	18	58%	4	2	6	19%	7	23%
8. Individual discussions of student placement	16	6	9	15	48%	7	1	8	26%	8	26%
11. Teacher exchange program	16	5	10	15	48%	8	1	9	29%	7	23%
13. K-14 curriculum committees	16	6	9	15	48%	7	0	7	23%	9	29%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
14. Jointly developed student/parent guides	16	4	11	15	48%	8	1	9	29%	7	23%
16. Coordinated testing program	16	2	13	15	48%	7	1	8	26%	8	26%
19. Joint program craft advisory committees	19	3	11	14	45%	9	1	10	32%	7	23%
15. Expanded student records	20	1	8	9	29%	8	2	10	32%	12	39%

Table 1-PI

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: SUGGESTED METHODS AND THEIR EFFECTIVNESS TOWARD IMPROVING ARTICULATION

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section I-Agreement/Disagreement

Postsecondary Instructors
N=102

Activity Arranged according to rank of agreement statements	Rank of Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
12. Teacher visitations to other schools	1	26	61	86	84%	3	2	5	5%	6	6%
1. Joint meetings with staff from other schools	3	29	46	75	74%	9	5	14	14%	7	7%
2. Shared course descriptions and program requirements	3	32	43	75	74%	11	4	15	15%	7	7%
3. Coordinated program objectives	4	24	47	71	70%	11	4	15	15%	10	10%
9. Student transfer guides between schools	5	25	42	67	66%	10	1	11	11%	15	15%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
10. Joint institute career days	6	26	37	63	62%	8	6	14	14%	19	19%
5. Exchanged curriculum guides	8	23	39	62	61%	10	5	15	15%	17	17%
16. Coordinated testing program	8	20	42	62	61%	8	7	15	15%	18	18%
20. Identified occupational role for each institution	9	21	40	61	60%	8	8	16	16%	17	17%
4. Coordinated student follow-up program	10	15	44	59	58%	14	4	18	18%	16	16%
7. General discussions of student placement	11	10	46	56	55%	17	3	20	20%	19	19%
17. Joint in-service programs	13	15	39	54	53%	18	8	26	26%	17	17%
18. Joint administrative articulation meetings	13	11	43	54	53%	11	6	17	17%	21	21%
6. Jointly developed curriculum guides	14	13	33	46	45%	23	6	29	28%	20	20%
8. Individual discussions of student placement	15	10	35	45	44%	20	4	24	24%	23	23%

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Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
11. Teacher exchange program	17	8	29	37	36%	29	11	40	39%	19	19%
13. K-14 curriculum committees	17	13	24	37	36%	13	7	20	20%	36	35%
19. Joint program craft advisory committees	18	10	23	33	32%	20	6	26	26%	33	32%
14. Jointly developed student/parent guides	19	5	27	32	31%	16	5	21	21%	39	38%
15. Expanded students records	20	4	26	30	29%	15	8	23	23%	39	38%

101

Table 1-PC

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: SUGGESTED METHODS AND THEIR EFFECTIVNESS TOWARD IMPROVING ARTICULATION

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section I-Agreement/Disagreement

Postsecondary Counselors
N=6

Activity Arranged according to rank of agreement statements	Rank of Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
1. Joint meetings with staff from other schools	3	4	2	6	100%	0	0	0	0%	0	0%
2. Shared course descriptions and program requirements	3	3	3	6	100%	0	0	0	0%	0	0%
3. Coordinated program objectives	3	2	4	6	100%	0	0	0	0%	0	0%
12. Teacher visitations to other schools	3	2	4	6	100%	0	0	0	0%	0	0%
20. Identified occupational role for each institution	3	4	2	6	100%	0	0	0	0%	0	0%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
5. Exchanged curriculum guides	8	2	3	5	83%	0	0	0	0%	1	17%
7. General discussions of student placement	8	2	3	5	83%	1	0	1	17%	0	0%
8. Individual discussions of student placement	8	1	4	5	83%	0	0	0	0%	1	17%
9. Student transfer guides between schools	8	4	1	5	83%	1	0	1	17%	0	0%
16. Coordinated testing program	8	1	4	5	83%	1	0	1	17%	0	0
4. Coordinated student follow-up program	13	2	2	4	67%	1	0	1	17%	1	17%
11. Teacher exchange program	13	2	2	4	67%	2	0	2	33%	0	0%
17. Joint in-service programs	13	0	4	4	67%	2	0	2	33%	0	0%
18. Joint administrative articulation meetings	13	1	3	4	67%	0	0	0	0%	2	33%
19. Joint program craft advisory committees	13	2	2	4	67%	0	0	0	0%	2	33%
6. Jointly developed curriculum guides	17	1	2	3	50%	3	0	3	50%	0	0%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
10. Joint institute career days	17	1	2	3	50%	3	0	3	50%	0	0%
13. K-14 curriculum committees	17	1	2	3	50%	3.	0	3	50%	0	0%
14. Jointly developed student/parent guides	19	1	1	2	33%	2	0	2	33%	2	33%
15. Expanded student records	20	0	1	1	17%	2	0	2	33%	3	50%

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Table 2-S

ACTIVITIES IDENTIFIED AS

HIGHEST PRIORITY FOR DEVELOPMENT OF A PROGRAM BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

TO IMPROVE K-14 CAREER AND VOCATIONAL EDUCATION ARTICULATION IN THE METRO NASHVILLE COMMUNITY

Section I-Prioritizing

Activity Arranged according to rank order results for **All Respondents**	Secondary Administrators N=20			Secondary Instructors N=96			Secondary Counselors N=21		
	Rank	Freq.	% of N	Rank	Freq.	% of N	Rank	Freq.	% of N
2. Shared course descriptions and program requirements	1	14	70%	1	60	63%	2	13	62%
1. Joint meetings with staff from other schools	3	12	60%	3	50	52%	3	12	57%
3. Coordinated program objectives	2	13	65%	2	52	54%	1	14	67%
12. Teacher visitations to other schools	7	7	35%	5	40	42%	4	10	48%
6. Jointly developed curriculum guides	5	10	50%	4	41	43%	6	6	29%
10. Joint institute career days	12	3	15%	8	27	28%	9	5	24%
17. Joint in-service programs	9	5	25%	7	30	31%	5	7	33%
9. Student transfer guides between schools	17	1	5%	12	15	16%	9	5	24%

Activity Arranged according to rank order results for **All Respondents**	Secondary Administrators N=20			Secondary Instructors N=96			Secondary Counselors N=21		
	Rank	Freq.	% of N	Rank	Freq.	% of N	Rank	Freq.	% of N
20. Idenfified occupational role for each institution	7	7	35%	11	16	17%	14	3	14%
5. Exchanged curriculum guides	17	1	5%	7	30	31%	17	2	10%
18. Joint administrative articulation meetings	4	11	55%	18	10	10%	17	2	10%
4. Coordinated student follow-up program	8	6	30%	10	17	18%	12	4	19%
16. Coordinated testing program	12	3	15%	16	11	12%	17	2	10%
11. Teacher exchange program	15	2	10%	10	17	18%	17	2	10%
13. K-14 curriculum committees	12	3	15%	14	12	13%	12	4	19%
7. General discussions of student placement	19	0	0%	19	6	6%	7	6	29%
8. Individual discussions of student placement	17	1	5%	14	12	13%	9	5	24%
14. Jointly developed student/ parent guides	15	2	10%	16	11	12%	12	4	19%
19. Joint program craft advisory committees	10	4	20%	16	11	12%	19	1	5%
15. Expanded student records	20	0	0%	20	2	2%	20	0	0%

Table 2-PS

ACTIVITIES IDENTIFIED AS

HIGHEST PRIORITY FOR DEVELOPMENT OF A PROGRAM BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

TO IMPROVE K-14 CAREER AND VOCATIONAL EDUCATION ARTICULATION IN THE METRO NASHVILLE COMMUNITY

Section I-Prioritizing

Activity Arranged according to rank order results for **All Respondents**	Postsecondary Administrators N=17			Postsecondary Instructors N=66			Postsecondary Counselors N=3		
	Rank	Freq.	% of N	Rank	Freq.	% of N	Rank	Freq.	% of N
2. Shared course descriptions and program requirements	2	11	65%	1	36	55%	8	1	33%
1. Joint meetings with staff from other schools	1	12	71%	2	32	49%	3	2	67%
3. Coordinated program objectives	10	3	18%	3	30	46%	0	0	0%
12. Teacher visitations to other schools	7	5	29%	4	26	39%	8	1	33%
6. Jointly developed curriculum guides	7	5	29%	7	20	30%	0	0	0%
10. Joint institute career days	13	2	12%	6	22	33%	3	2	67%
17. Joint in-service programs	8	4	24%	13	11	17%	0	0	0%
9. Student transfer guides between schools	3	9	53%	6	22	33%	3	2	67%

Activity Arranged according to rank order results for **All Respondents**	Postsecondary Administrators N=17			Postsecondary Instructors N=66			Postsecondary Counselors N=3		
	Rank	Freq.	% of N	Rank	Freq.	% of N	Rank	Freq.	% of N
20. Identified occupational role for each institution	5	6	35%	8	19	29%	8	1	33%
5. Exchanged curriculum guides	17	1	6%	9	17	26%	8	1	33%
18. Joint administrative articulation meetings	4	8	47%	11	13	20%	0	0	0%
4. Coordinated student follow-up program	13	2	12%	16	8	12%	8	1	33%
16. Coordinated testing program	10	3	18%	10	16	24%	0	0	0%
11. Teacher exchange program	13	2	12%	15	9	14%	3	2	67%
13. K-14 curriculum committees	13	2	12%	15	9	14%	0	0	0%
7. General discussions of student placement	19	0	0%	13	11	17%	3	2	67%
8. Individual discussions of student placement	17	1	6%	17	6	9%	0	0	0%
14. Jointly developed student/parent guides	17	1	6%	18	5	8%	0	0	0%
19. Joint program craft advisory committees	17	1	6%	19	4	6%	0	0	0%
15. Expanded student records	20	0	0%	20	2	3%	0	0	0%

Table 3-SA

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: ACTIVITIES THAT SHOULD BE INITIATED TO IMPROVE THE ARTICULATION PROCESS

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section II-Agreement/Disagreement

Secondary Administrators
N=28

Activity Arranged according to rank of agreement statements	Rank of Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
1. Increased efforts to improve articulation among all K-14 vocational delivery systems	2	14	14	28	100%	0	0	0	0%	0	0%
5. Joint development and sharing of labor market data for program planning	2	14	14	28	100%	0	0	0	0%	0	0%
6. Increased involvement of business and industry in vocational curriculum development	2	21	7	28	100%	0	0	0	0%	0	0%
3. Secondary/postsecondary cooperative approach to develop sequential curriculum in occupational programs that can be directly linked	5	15	12	27	93%	1	0	1	4%	1	4%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
9. Increased involvement and planning with agencies such as METRA, Labor, Manpower Advisory committee, Private Industry Council, Chamber of Commerce, Employment Security, etc.	5	10	17	27	93%	0	0	0	0%	1	4%
10. Joint development of guidelines for appropriate placement and credit between secondary/postsecondary	5	11	16	27	93%	0	1	1	4%	1	4%
4. Standardized course objectives and identified competencies for those secondary/postsecondary programs that can be linked	8	16	10	26	90%	2	0	2	7%	1	4%
11. Secondary/postsecondary joint development of competency or skill measurement criteria for recognition of occupational proficiencies	8	13	13	26	90%	1	0	1	4%	2	7%
7. Formal communication and sharing between public delivery systems and propriety schools	9	4	21	25	86%	0	1	1	4%	3	11%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
12. Single local advisory committee common to secondary and postsecondary content areas that can be linked	10	7	17	24	83%	5	0	5	18%	0	0%
8. Joint secondary/postsecondary inservice planning and staff development workshops	11	7	14	21	72%	5	0	5	18%	3	11%
2. Shared facilities and staff, where feasible, among secondary and postsecondary programs	12	7	11	18	62%	4	1	5	18%	6	21%

Table 3-SI

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: ACTIVITIES THAT SHOULD BE INITIATED TO IMPROVE THE ARTICULATION PROCESS

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section II-Agreement/Disagreement

Secondary Instructors
N=147

Activity Arranged according to rank of agreement statements	Rank of Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
6. Increased involvement of business and industry in vocational curriculum development	1	88	48	136	93%	4	1	5	3%	4	3%
5. Joint development and sharing of labor market data for program planning	2	56	77	133	91%	6	0	6	4%	6	4%
4. Standardized course objectives and identified competencies for those secondary/postsecondary programs that can be linked	3	45	85	130	88%	9	1	10	7%	5	3%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
3. Secondary/postsecondary cooperative approach to develop sequential curriculum in occupational programs that can be directly linked	4	41	84	125	85%	12	1	13	9%	7	5%
9. Increased involvement and planning with agencies such as METRA, Labor, Manpower Advisory Committee, Private Industry Council, Chamber of Commerce, Employment Security etc.	5	38	82	120	82%	11	1	12	8%	11	8%
1. Increase efforts to improve articulation among all K-14 vocational delivery systems	6	44	74	118	80%	12	0	12	8%	14	10%
10. Joint development of guidelines for appropriate placement and credit between secondary/postsecondary	7	25	92	117	80%	10	1	11	8%	14	10%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
11. Secondary/postsecondary joint development of competency or skill measurement criteria for recognition of occupational proficiencies	8	43	70	113	77%	9	1	10	7%	20	14%
8. Joint secondary/postsecondary inservice planning and staff development workshops	9	30	79	109	74%	21	1	22	15%	13	9%
12. Single local advisory committee common to secondary and postsecondary content areas that can be linked	10	28	79	107	73%	15	4	19	13%	16	11%
7. Formal communication and sharing between public delivery systems and propriety schools	11	17	67	84	57%	18	3	21	14%	36	25%
2. Shared facilities and staff, where feasible, among secondary and postsecondary programs	12	20	62	82	56%	35	13	48	33%	15	10%

Table 3-SC

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: ACTIVITIES THAT SHOULD BE INITIATED TO IMPROVE THE ARTICULATION PROCESS

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section II-Agreement/Disagreement

Secondary Counselors
N=29

Activity Arranged according to rank of agreement statements	**Rank of Agreement Statements**	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	**% of N**	Disagree	Strongly Disagree	Total	% of N	Total	% of N
3. Secondary/post-secondary cooperative approach to develop sequential curriculum in occupational programs that can be directly linked	**2**	13	16	29	**100%**	0	0	0	0%	0	0%
4. Standardized course objectives and identified competencies for those secondary/postsecondary programs that can be linked	**2**	15	14	29	**100%**	0	0	0	0%	0	0%
6. Increased involvement of business and industry in vocational curriculum development	**2**	16	13	29	**100%**	0	0	0	0%	0	0%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
10. Joint development of guidelines for appropriate placement and credit between secondary/post-secondary	4	9	19	28	97%	1	0	1	4%	0	0%
9. Increased involvement and planning with agencies such as METRA, Labor, Manpower Advisory Committee, Private Industry Council, Chamber of Commerce, Employment Security, etc,	5	11	16	27	93%	2	0	2	7%	0	0%
5. Joint development and sharing of labor market data for program planning	7	11	15	26	90%	1	0	1	4%	2	7%
11. Secondary/postsecondary joint development of competency or skill measurement criteria for recognition of occupational proficiencies	7	14	12	26	90%	1	0	1	4%	2	7%
1. Increased efforts to improve articulation among all K-14 vocational delivery systems	9	11	14	25	86%	1	0	1	4%	3	10%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
2. Shared facilities and staff, where feasible, among secondary and post-secondary programs	9	12	13	25	86%	1	0	1	4%	3	10%
8. Joint secondary/post-secondary inservice planning and staff development workshops	9	6	19	25	86%	2	0	2	7%	2	7%
12. Single local advisory committee common to secondary and postsecondary content area that can be linked	11	6	18	24	83%	0	0	0	0%	4	14%
7. Formal communication and sharing between public delivery systems and propriety schools	12	4	15	19	66%	2	0	2	7%	8	28%

Table 3-PA

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: ACTIVITIES THAT SHOULD BE INITIATED TO IMPROVE THE ARTICULATION PROCESS

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section II-Agreement/Disagreement

Postsecondary Administrators
N=31

Activity Arranged according to rank of agreement statements	Rank of Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
1. Increased efforts to improve articulation among all K-14 vocational delivery systems	1	12	18	30	97%	0	0	0	0%	1	3%
3. Secondary/postsecondary cooperative approach to develop sequential curriculum in occupational programs that can be directly linked	3	9	19	28	90%	1	1	2	7%	1	3%
6. Increased involvement of business and industry in vocational curriculum development	3	23	5	28	90%	1	0	1	3%	2	7%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
9. Increased involvement and planning with agencies such as METRA, Labor, Manpower Advisory committee, Private Industry Council, Chamber of Commerce, Employment Security, etc.	4	5	22	27	87%	2	0	2	7%	2	7%
5. Joint development and sharing of labor market data for program planning	6	16	10	26	84%	1	1	2	7%	3	10%
10. Joint development of guidelines for appropriate placement and credit between secondary/post-secondary	6	9	17	26	84%	2	1	3	10%	2	7%
11. Secondary/postsecondary joint development of competency or skill measurement criteria for recognition of occupational proficiencies	6	8	18	26	84%	1	1	2	7%	3	10%
8. Joint secondary/post-secondary inservice planning and staff development workshops	8	5	20	25	81%	4	0	4	13%	2	7%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
4. Standardized course objectives and identified competencies for those secondary/postsecondary programs that can be linked	9	7	14	21	68%	6	0	6	19%	4	13%
2. Shared facilities and staff, where feasible, among secondary and post-secondary programs	10	5	15	20	65%	5	2	7	23%	4	13%
7. Formal communication and sharing between public delivery systems and propriety schools	11	10	8	18	58%	6	2	8	26%	5	16%
12. Single local advisory committee common to secondary and postsecondary content areas that can be linked	12	5	4	9	29%	11	2	13	42%	9	29%

Table 3-PI

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: ACTIVITIES THAT SHOULD BE INITIATED TO IMPROVE THE ARTICULATION PROCESS

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section II-Agreement/Disagreement

Postsecondary Instructors
N=102

Activity Arranged according to rank of agreement statements	Rank of Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
6. Increased involvement of business and industry in vocational curriculum development	1	54	40	94	92%	4	0	4	4%	1	1%
5. Joint development and sharing of labor market data for program planning	2	30	48	78	77%	6	0	6	6%	13	13%
3. Secondary/postsecondary cooperative approach to develop sequential curriculum in occupational programs that can be directly linked	4	29	47	76	75%	8	3	11	11%	9	9%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
4. Standardized course objectives and identified competencies for those secondary/postsecondary programs that can be linked	4	27	49	76	75%	13	3	16	16%	5	5%
1. Increased efforts to improve articulation among all K-14 vocational delivery systems	5	25	50	75	74%	2	1	3	3%	17	17%
11. Secondary/postsecondary joint development of competency or skill measurement criteria for recognition of occupational proficiencies	6	32	42	74	73%	2	3	5	5%	16	16%
10. Joint development of guidelines for appropriate placement and credit between secondary/postsecondary	7	22	48	70	69%	10	2	12	12%	15	15%
9. Increased involvement and planning with agencies such as METRA, Labor, Manpower Advisory committee, Private Industry Council, Chamber of Commerce, Employment Security, etc.	8	22	40	62	61%	13	2	15	15%	20	20%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
7. Formal communication and sharing between public delivery systems and propriety schools	10	11	47	58	57%	12	3	15	15%	23	23%
8. Joint secondary/post-secondary inservice planning and staff development workshops	10	18	40	58	57%	14	8	22	22%	16	16%
2. Shared facilities and staff, where feasible, among secondary and post-secondary programs	11	11	41	52	51%	19	16	35	29%	11	11%
12. Single local advisory committee common to secondary and postsecondary content areas that can be linked	12	10	37	47	46%	15	5	20	20%	26	26%

Table 3-PC

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

INDICATIONS OF AGREEMENT

RE: ACTIVITIES THAT SHOULD BE INITIATED TO IMPROVE THE ARTICULATION PROCESS

BETWEEN SECONDARY AND POSTSECONDARY INSTITUTIONS

Section II-Agreement/Disagreement

Postsecondary Counselors
N=6

Activity Arranged according to rank of agreement statements	Rank of Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
1. Increased efforts to improve articulation among all K-14 vocational delivery systems	3	3	3	6	100%	0	0	0	0%	0	0%
5. Joint development and sharing of labor market data for program planning	3	4	2	6	100%	0	0	0	0%	0	0%
6. Increased involvement of business and industry in vocational curriculum development	3	4	2	6	100%	0	0	0	0%	0	0%
10. Joint development of guidelines for appropriate placement and credit between secondary/post-secondary	3	3	3	6	100%	0	0	0	0%	0	0%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
11. Secondary/postsecondary joint development of competency or skill measurement criteria for recognition of occupational proficiencies	3	2	4	6	100%	0	0	0	0%	0	0%
3. Secondary/postsecondary cooperative approach to develop sequential curriculum in occupational programs that can be directly linked	8	1	4	5	83%	0	0	0	0%	1	17%
4. Standardized course objectives and identified competencies for those secondary/postsecondary programs that can be linked	8	3	2	5	83%	1	0	1	17%	0	0%
8. Joint secondary/postsecondary inservice planning and staff development workshops	8	1	4	5	83%	0	0	0	0%	1	17%
9. Increased involvement and planning with agencies such as METRA, Labor, Manpower Advisory committee, Private Industry Council, Chamber of Commerce, Employment Security, etc.	8	1	4	5	83%	0	0	0	0%	1	17%

Activity Arranged according to rank of agreement statements	Rank Agreement Statements	Tend to Agree				Tend to Disagree				Not Sure	
		Strongly Agree	Agree	Total	% of N	Disagree	Strongly Disagree	Total	% of N	Total	% of N
7. Formal communication and sharing between public delivery systems and propriety schools	10	2	2	4	67%	1	0	1	17%	1	17%
2. Shared facilities and staff, where feasible, among secondary and postsecondary programs	11	1	2	3	50%	2	0	2	33%	1	17%
12. Single local advisory committee common to secondary and postsecondary content areas that can be linked	12	0	2	2	33%	3	0	3	50%	1	17%

Table 4-SA

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

"WHAT IS" and "WHAT SHOULD BE"

Section III

Secondary Administrators
N=28

Statement Ranked according to results of **"What Should Be"** occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
7. Career counseling is included as a responsibility of the guidance counselors at our school	6(21%)	0(0%)	19(68%)	0(0%)	0(0%)	**25(89%)**	**1.5**
11. My school provides vocational graduates with adequate information concerning postsecondary vocational training available in our community	8(29%)	0(0%)	17(61%)	0(0%)	0(0%)	**25(89%)**	**1.5**
5. Students are adequately oriented to career awareness in the elementary school programs in the Metro Schools	20(71%)	2(7%)	4(14%)	1(4%)	1(4%)	**24(86%)**	**4**

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
8. Career counseling is included as a responsibility of vocational instructors at our school	10(36%)	0(0%)	15(54%)	1(4%)	0(0%)	**24(86%)**	**4**
9. An adequate system of placement and follow-up for vocational graduates, either employment and/or postsecondary education, exists in our school	14(50%)	0(0%)	11(39%)	1(4%)	0(0%)	**24(86%)**	**4**
6. Students are adequately oriented to secondary vocational program opportunities in the middle school programs in the Metro Schools	14(50%)	5(18%)	6(21%)	1(4%)	2(7%)	**22(79%)**	**6.5**
12. Students who have completed vocational training at our school and want apprenticeship opportunity can receive advanced standing in the apprenticeship program	19(68%)	3(11%)	3(11%)	1(4%)	2(7%)	**22(79%)**	**6.5**

Statement Ranked according to results of **"What Should Be"** occurring frequently or almost always	WHAT IS			**WHAT SHOULD BE**			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
4. Closer cooperation and program planning between secondary and postsecondary schools would enhance occupation preparation and avoid any unnecessary duplication	23(82%)	1(4%)	1(4%)	5(18%)	0(0%)	**21(75%)**	**8.5**
10. Students completing vocational programs at the secondary level are eligible for advanced placement or credit at postsecondary institutions in our area	17(61%)	5(18%)	3(11%)	2(7%)	2(7%)	**21(75%)**	**8.5**
1. Efforts are made to coordinate course content between my school and the public postsecondary programs within the Metro Nashville Area	24(86%)	1(4%)	1(4%)	4(14%)	2(7%)	**20(71%)**	**10**
2. Efforts are made to coordinate course content with private postsecondary programs within the Metro Nashville area	23(82%)	2(7%)	1(4%)	6(21%)	4(14%)	**16(57%)**	**11**

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
3. Overlap in similar curriculum materials presented at postsecondary levels constitutes a problem for the secondary vocational program graduates	11(39%)	6(21%)	8(29%)	15(54%)	6(21%)	**4(14%)**	**12**

Table 4-SI

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

"WHAT IS" AND "WHAT SHOULD BE"

Section III

Secondary Instructors
N=147

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
7. Career counseling is included as a responsibility of the guidance counselors at our school	75(51%)	9(6%)	44(30%)	6(4%)	0(0%)	**119(81%)**	**1**
11. My school provides vocational graduates with adequate information concerning postsecondary vocational training available in our community	48(33%)	10(7%)	73(50%)	4(3%)	3(2%)	**118(80%)**	**2**
9. An adequate system of placement and follow-up for vocational graduates, either employment and/or postsecondary education, exists in our school	79(54%)	6(4%)	47(32%)	8(5%)	1(1%)	**114(78%)**	**3**

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
6. Students are adequately oriented to secondary vocational program opportunities in the middle school programs in the Metro Schools	99(67%)	12(8%)	18(12%)	8(5%)	5(3%)	**110(75%)**	**4**
8. Career counseling is included as a responsibility of vocational instructors at our school	37(25%)	1(1%)	94(64%)	16(11%)	3(2%)	**105(71%)**	**5**
5. Students are adequately oriented to career awareness in the elementary school programs in the Metro Schools	94(64%)	25(17%)	7(5%)	12(8%)	15(10%)	**99(67%)**	**6**
10. Students completing vocational programs at the secondary level are eligible for advanced placement or credit at postsecondary institutions in our area	72(49%)	30(20%)	22(15%)	15(10%)	13(9%)	**95(65%)**	**7**
1. Efforts are made to coordinate course content between my school and the public postsecondary programs within the Metro Nashville Area	103(70%)	8(5%)	15(10%)	22(15%)	9(6%)	**94(64%)**	**8**

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
12. Students who have completed vocational training at our school and want apprenticeship opportunity can receive advanced standing in the apprenticeship program	58(39%)	56(38%)	12(8%)	6(4%)	23(16%)	**91(62%)**	**9**
4. Closer cooperation and program planning between secondary and postsecondary schools would enhance occupation preparation and avoid any unnecessary duplication	91(62%)	18(12%)	12(8%)	27(18%)	16(11%)	**84(57%)**	**10**
2. Efforts are made to coordinate course content with private post-secondary programs within the Metro Nashville area	102(69%)	15(10%)	7(5%)	31(21%)	25(17%)	**70(48%)**	**11**
3. Overlap in similar curriculum materials presented at postsecondary levels constitutes a problem for the secondary vocational program graduates	73(50%)	32(22%)	24(16%)	83(56%)	27(18%)	**11(7%)**	**12**

Table 4-SC

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

"WHAT IS" AND "WHAT SHOULD BE"

Section III

Secondary Counselors
N=29

Statement Ranked according to results of **"What Should Be"** occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
5. Students are adequately oriented to career awareness in the elementary school programs in the Metro Schools	19(66%)	6(21%)	2(7%)	0(0%)	1(3%)	**27(93%)**	**1**
7. Career counseling is included as a responsibility of the guidance counselors at our school	2(7%)	0(0%)	25(86%)	0(0%)	0(0%)	**25(86%)**	**2**
1. Efforts are made to coordinate course content between my school and the public postsecondary programs within the Metro Nashville Area	17(59%)	3(10%)	6(21%)	0(0%)	1(3%)	**24(83%)**	**3.5**

Statement Ranked according to results of **"What Should Be"** occurring frequently or almost always	WHAT IS			**WHAT SHOULD BE**			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
6. Students are adequately oriented to secondary vocational program opportunities in the middle school programs in the Metro Schools	20(69%)	4(14%)	3(10%)	1(3%)	1(3%)	**24(83%)**	**3.5**
4. Closer cooperation and program planning between secondary and postsecondary schools would enhance occupation preparation and avoid any unnecessary duplication	17(59%)	2(7%)	6(21%)	1(3%)	0(0%)	**23(79%)**	**6**
9. An adequate system of placement and follow-up for vocational graduates, either employment and/or postsecondary education, exists in our school	13(45%)	4(14%)	9(31%)	1(3%)	0(0%)	**23(79%)**	**6**
11. My school provides vocational graduates with adequate information concerning postsecondary vocational training available in our community	8(28%)	1(3%)	16(55%)	0(0%)	0(0%)	**23(79%)**	**6**

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
8. Career counseling is included as a responsibility of vocational instructors at our school	8(28%)	4(14%)	14(48%)	2(7%)	2(7%)	**21(72%)**	**8.5**
12. Students who have completed vocational training at our school and want apprenticeship opportunity can receive advanced standing in the apprenticeship program	11(38%)	8(28%)	6(21%)	1(3%)	1(3%)	**21(72%)**	**8.5**
2. Efforts are made to coordinate course content with private post-secondary programs within the Metro Nashville area	16(55%)	5(17%)	4(14%)	2(7%)	5(17%)	**18(62%)**	**10.5**
10. Students completing vocational programs at the secondary level are eligible for advanced placement or credit at post-secondary institutions in our area	17(59%)	7(24%)	1(3%)	1(3%)	3(10%)	**18(62%)**	**10.5**

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Rank of Frequently or Almost Always
3. Overlap in similar curriculum materials presented at postsecondary levels constitutes a problem for the secondary vocational program graduates	15(52%)	6(21%)	5(17%)	20(69%)	4(14%)	1(3%)	12

Table 4-PA

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

"WHAT IS" AND "WHAT SHOULD BE"

Section III

Postsecondary Administrators
N=31

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Rank of Frequently or Almost Always
5. Most basic skills required of students continuing occupational preparation at the post-secondary level have been adequately covered by secondary schools	26(84%)	1(3%)	3(10%)	1(3%)	2(6%)	27(87%)	1.5
7. My school provides secondary schools with adequate information concerning appropriate courses and ability placement in occupational fields	16(52%)	0(0%)	14(45%)	1(3%)	2(6%)	27(87%)	1.5

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
9. Most students who have completed secondary vocational training are placed in appropriate courses compatible with their previous occupational selection	11(35%)	5(16%)	13(42%)	2(6%)	1(3%)	**26(84%)**	**3**
6. Students with prior vocational training at the secondary level are eligible for advanced placement or credit based on demonstrated proficiency	20(65%)	1(3%)	9(29%)	4(13%)	1(32%)	**25(81%)**	**4**
10. High school vocational education graduates should be encouraged to enroll in postsecondary career programs as a means of continuing their education	10(32%)	10(32%)	9(29%)	2(6%)	5(16%)	**22(71%)**	**5**
1. Efforts are made to coordinate course content between my institution and the secondary programs within the area	29(94%)	1(3%)	0(0%)	5(16%)	4(13%)	**21(68%)**	**6.5**

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Rank of Frequently or Almost Always
4. Closer cooperation and program planning between postsecondary and secondary schools would enhance occupational preparation and avoid unnecessary duplication	22(71%)	7(23%)	0(0%)	3(10%)	5(16%)	21(68%)	6.5
2. Efforts are made to coordinate course content with other postsecondary programs within the Metro Nashville area	27(87%)	1(3%)	2(6%)	7(23%)	6(19%)	17(55%)	8
8. Students who have completed vocational training at our school and want apprenticeship opportunity can receive advanced standing in the apprenticeship program	14(45%)	7(23%)	6(19%)	5(16%)	8(26%)	14(45%)	9
3. Overlap in similar curriculum presented at secondary levels constitutes a problem for postsecondary vocational programs	21(68%)	7(23%)	2(6%)	23(74%)	6(19%)	1(3%)	10

Table 4-PI

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

"WHAT IS" AND "WHAT SHOULD BE"

Section III

Postsecondary Instructors
N=102

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Rank of Frequently or Almost Always
10. High school vocational education graduates should be encouraged to enroll in postsecondary career programs as a means of continuing their education	37(36%)	26(25%)	24(24%)	5(5%)	11(11%)	75(74%)	1
5. Most basic skills required of students continuing occupational preparation at the postsecondary level have been adequately covered by secondary schools	67(66%)	13(13%)	12(12%)	7(7%)	9(9%)	72(71%)	2

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
7. My school provides secondary schools with adequate information concerning appropriate courses and ability placement in occupational fields	28(27%)	27(26%)	33(32%)	6(6%)	13(13%)	**70(69%)**	**3**
4. Closer cooperation and program planning between postsecondary and secondary schools would enhance occupational preparation and avoid unnecessary duplication	60(59%)	18(18%)	12(12%)	12(12%)	15(15%)	**65(64%)**	**4**
9. Most students who have completed secondary vocational training are placed in appropriate courses compatible with their previous occupational selection	31(30%)	24(24%)	31(30%)	6(6%)	19(19%)	**61(60%)**	**5**
1. Efforts are made to coordinate course content between my institution and the secondary programs within the area	76(75%)	12(12%)	4(4%)	21(21%)	12(12%)	**59(58%)**	**6**

Statement Ranked according to results of **"What Should Be"** occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
6. Students with prior vocational training at the secondary level are eligible for advanced placement or credit based on demonstrated proficiency	51(50%)	12(12%)	29(28%)	22(22%)	10(10%)	**58(57%)**	**7**
2. Efforts are made to coordinate course content with other postsecondary programs within the Metro Nashville area	72(71%)	9(9%)	9(9%)	18(18%)	19(19%)	**55(54%)**	**8**
8. Students who have completed vocational training at our school and want apprenticeship opportunity can receive advanced standing in the apprenticeship program	26(25%)	32(31%)	16(16%)	8(8%)	28(27%)	**41(40%)**	**9**
3. Overlap in similar curriculum presented at secondary levels constitutes a problem for post-secondary vocational programs	**58(57%)**	**23(23%)**	**9(9%)**	56(55%)	25(25%)	**4(4%)**	**10**

Table 4-PC

Scale:
1-Strongly Agree
2-Agree
3-Disagree
4-Strongly Disagree
5-Not Sure

"WHAT IS" AND "WHAT SHOULD BE"

Section III

Postsecondary Counselors
N=6

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Rank of Frequently or Almost Always
5. Most basic skills required of students continuing occupational preparation at the post-secondary level have been adequately covered by secondary schools	4(67%)	0(0%)	2(33%)	0(0%)	0(0%)	5(83%)	1.5
7. My school provides secondary schools with adequate information concerning appropriate courses and ability placement in occupational fields	3(50%)	0(0%)	3(50%)	0(0%)	0(0%)	5(83%)	1.5

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
1. Efforts are made to coordinate course content between my institution and the secondary programs within the area	5(83%)	0(0%)	1(17%)	1(17%)	0(0%)	**4(67%)**	**5**
2. Efforts are made to coordinate course content with other postsecondary programs within the Metro Nashville area	6(100%)	0(0%)	0(0%)	1(17%)	0(0%)	**4(67%)**	**5**
4. Closer cooperation and program planning between postsecondary and secondary schools would enhance occupational preparation and avoid unnecessary duplication	4(67%)	1(17%)	0(0%)	2(33%)	0(0%)	**4(67%)**	**5**
6. Students with prior vocational training at the secondary level are eligible for advanced placement or credit based on demonstrated proficiency	5(83%)	0(0%)	1(17%)	0(0%)	1(17%)	**4(67%)**	**5**

Statement Ranked according to results of "What Should Be" occurring frequently or almost always	WHAT IS			WHAT SHOULD BE			
	Frequency and (% of N)			Frequency and (% of N)			
	Almost Never or Occasionally	Undecided	Frequently or Almost Always	Almost Never or Occasionally	Undecided	**Frequently or Almost Always**	**Rank of Frequently or Almost Always**
10. High school vocational education graduates should be encouraged to enroll in postsecondary career programs as a means of continuing their education	0(0%)	2(33%)	3(50%)	1(17%)	1(17%)	**4(67%)**	**5**
8. Students who have completed vocational training at our school and want apprenticeship opportunity can receive advanced standing in the apprenticeship program	2(33%)	3(50%)	1(17%)	0(0%)	2(33%)	**3(50%)**	**8**
9. Most students who have completed secondary vocational training are placed in appropriate courses compatible with their previous occupational selection	0(0%)	3(50%)	3(50%)	0(0%)	3(50%)	**2(33%)**	**9**
3. Overlap in similar curriculum presented at secondary levels constitutes a problem for postsecondary vocational programs	2(33%)	2(33%)	2(33%)	3(50%)	1(17%)	**1(17%)**	**10**

Table 5-SA

ACTIVITY PARTICIPATION

Section III

Secondary Administrators
N=28

Activities in which respondents' school or staff participated within last two years

Activity	Frequency	% of N	Rank
1. Staff development workshops with postsecondary vocational education personnel	8	28.6%	3
2. Sharing facilities and staff with other secondary vocational programs	9	32.1%	2
3. Sharing facilities and staff with postsecondary vocational programs	6	21.4%	5.5
Working with postsecondary vocational education personnel to develop the following:			
4. Course objectives and competencies	5	17.9%	7.5
5. Sequential vocational education curriculum	7	25.0%	4
6. Competency tests	4	14.3%	9
7. Meeting with postsecondary vocational education personnel to plan articulation of secondary and post-secondary vocational education programs	5	17.9%	7.5

Activities in which respondents' school or staff participated within last two years

Activity	Frequency	% of N	Rank
8. Contracting with outside schools or agencies that provide specialized vocational training which your school cannot provide	6	21.4%	5.5
9. Visitation programs with post-secondary institutions offering vocational education	19	67.9%	1

Table 5-SI

ACTIVITY PARTICIPATION

Section III

Secondary Instructors
N=147

Activities in which respondents' school or staff participated within last two years

Activity	Frequency	% of N	Rank
1. Staff development workshops with postsecondary vocational education personnel	31	21.1%	3
2. Sharing facilities and staff with other secondary vocational programs	39	26.5%	2
3. Sharing facilities and staff with postsecondary vocational programs	17	11.6%	6
Working with postsecondary vocational education personnnel to develop the following:			
4. Course objectives and competencies	28	19.1%	4
5. Sequential vocational education curriculum	25	17.0%	5
6. Competency tests	9	6.1%	8
7. Meeting with postsecondary vocational education personnel to plan articulation of secondary and post-secondary vocational education programs	8	5.4%	9

Activities in which respondents' school or staff participated within last two years

Activity	Frequency	% of N	Rank
8. Contracting with outside schools or agencies that provide specialized vocational training which your school cannot provide	11	7.5%	7
9. Visitation programs with post-secondary institutions offering vocational education	46	31.3%	1

Table 5-SC

ACTIVITY PARTICIPATION

Section III

Secondary Counselors
N=29

Activities in which respondents' school or staff participated within last two years

Activity	Frequency	% of N	Rank
1. Staff development workshops with postsecondary vocational education personnel	11	37.9%	2
2. Sharing facilities and staff with other secondary vocational programs	9	31.0%	3
3. Sharing facilities and staff with postsecondary vocational programs	2	6.9%	9
Working with postsecondary vocational education personnel to develop the following:			
4. Course objectives and competencies	5	17.2%	5.5
5. Sequential vocational education curriculum	3	10.3%	7.5
6. Competency tests	3	10.3%	7.5
7. Meeting with postsecondary vocational education personnel to plan articulation of secondary and post-secondary vocational education programs	7	24.1%	4

Activities in which respondents' school or staff participated within last two years

Activity	Frequency	% of N	Rank
8. Contracting with outside schools or agencies that provide specialized vocational training which your school cannot provide	5	17.2%	5.5
9. Visitation programs with post-secondary institutions offering vocational education	16	55.2%	1

Table 5-PA

ACTIVITY PARTICIPATION

Section III

Postsecondary Administrators
N=31

Activities in which respondents' school or staff participated within last two years

Activity	Frequency	% of N	Rank
1. Staff development workshops with secondary vocational education personnel	11	35.5%	3
2. Sharing facilities and staff with secondary vocational programs	9	29.0%	4
3. Sharing facilities and staff with other postsecondary vocational programs	16	51.6%	1
Working with secondary vocational education personnel to develop the following:			
4. Course objectives and competencies	3	9.7%	8.5
5. Sequential vocational curriculum	3	9.7%	8.5
6. Competency tests	1	3.2%	10
Working with other postsecondary vocational education personnel to develop the following:			
7. Credit transfer policies	15	48.4%	2
8. Course objectives and competencies	7	22.6%	6

Activities in which respondents' school or staff participated within last two years

Activity	Frequency	% of N	Rank
9. Competency tests	5	16.1%	7
10. Meeting with secondary vocational education personnel to plan articulation of secondary and postsecondary vocational education programs	8	25.8%	5

Table 5-PI

ACTIVITY PARTICIPATION

Section III

Postsecondary Instructors
N=102

Activities in which respondents' school or staff participated within last two years

Activity	Frequency	% of N	Rank
1. Staff development workshops with secondary vocational education personnel	29	28.4%	1
2. Sharing facilities and staff with secondary vocational programs	14	13.7%	6
3. Sharing facilities and staff with other postsecondary vocational programs	28	27.5%	2
Working with secondary vocational education personnel to develop the following:			
4. Course objectives and competencies	8	7.8%	8
5. Sequential vocational curriculum	4	3.9%	9.5
6. Competency tests	4	3.9%	9.5
Working with other postsecondary vocational education personnel to develop the following:			
7. Credit transfer policies	23	22.6%	3
8. Course objectives and competencies	17	16.7%	4.5

Activities in which respondents' school or staff participated within last two years

Activity	Frequency	% of N	Rank
9. Competency tests	11	10.8%	7
10. Meeting with secondary vocational education personnel to plan articulation of secondary and postsecondary vocational education programs	17	16.7%	4.5

Table 5-PC

ACTIVITY PARTICIPATION

Section III

Postsecondary Counselors
N=6

Activities in which respondents' school or staff participated within last two years

Activity	Frequency	% of N	Rank
1. Staff development workshops with secondary vocational education personnel	4	66.7%	1.5
2. Sharing facilities and staff with secondary vocational programs	1	16.7%	4.5
3. Sharing facilities and staff with other postsecondary vocational programs	4	66.7%	1.5
Working with secondary vocational education personnel to develop the following:			
4. Course objectives and competencies	0	0	0
5. Sequential vocational curriculum	0	0	0
6. Competency tests	0	0	0
Working with other postsecondary vocational education personnel to develop the following:			
7. Credit transfer policies	3	50.0%	3

Activities in which respondents' school or staff participated within last two years

Activity	Frequency	% of N	Rank
8. Course objectives and competencies	0	0	0
9. Competency tests	0	0	0
10. Meeting with secondary vocational education personnel to plan articulation of secondary and postsecondary vocational education programs	1	16.7%	4.5

Table 6-SA

ROLES OF SECONDARY AND POSTSECONDARY EDUCATION

Section III

Secondary Administrators
N=28

Questions	Yes		No		No Opinion	
	Frequency	% of N	Frequency	% of N	Frequency	% of N
1. Considering the trend towards longer formal education for all students, do you feel that all occupational education should be taught at the secondary level?	27	96.4%	0	0	1	3.6%
If Yes, do you feel that basic occupational education should begin at the secondary level and progress to advance occupational training in the postsecondary school years?	27	96.4%	0	0	1	3.6%
2. Do you feel it is realistic to design secondary vocational programs to prepare students to continue in their speciality at the postsecondary level as well as to immediately enter the labor force?	25	89.3%	4	14.3%	0	0

Questions	Yes		No		No Opinion	
	Frequency	% of N	Frequency	% of N	Frequency	% of N
3. Do you feel it is realistic to design secondary vocational programs in extended time periods (2 & 3 hour blocks) for indepth concentration of curricula?	20	71.4%	7	25.0%	1	3.6%
4. Do you feel high school vocational programs in our area provide the occupational preparation needed by a student to successfully continue in the postsecondary occupational program?	25	89.3%	3	10.7%	0	0
5. Do you feel there is unnecessary overlap and duplication in the vocational curriculum at secondary and postsecondary levels?	13	46.4%	8	28.6%	7	25.0%
6. Do you feel the high school vocational education graduate is competing for the same job as the postsecondary vocational graduate most of the time?	13	46.4%	13	46.4%	2	7.1%

Table 6-SI

ROLES OF SECONDARY AND POSTSECONDARY EDUCATION

Section III

Secondary Instructors
N=147

Questions	Yes		No		No Opinion	
	Frequency	% of N	Frequency	% of N	Frequency	% of N
1. Considering the trend towards longer formal education for all students, do you feel that all occupational education should be taught at the secondary level?	140	95.2%	6	4.1%	0	0
If Yes, do you feel that basic occupational education should begin at the secondary level and progress to advance occupational training in the postsecondary school years?	133	90.5%	6	4.1%	4	2.7%
2. Do you feel it is realistic to design secondary vocational programs to prepare students to continue in their speciality at the postsecondary level as well as to immediately enter the labor force?	134	91.2%	9	6.1%	3	2.0%

Questions	Yes		No		No Opinion	
	Frequency	% of N	Frequency	% of N	Frequency	% of N
3. Do you feel it is realistic to design secondary vocational programs in extended time periods (2 & 3 hour blocks) for indepth concentration of curricula?	111	75.5%	26	17.7%	6	4.1%
4. Do you feel high school vocational programs in our area provide the occupational preparation needed by a student to successfully continue in the postsecondary occupational program?	116	78.9%	20	13.6%	7	4.8%
5. Do you feel there is unnecessary overlap and duplication in the vocational curriculum at secondary and postsecondary levels?	43	29.3%	72	49.0%	25	17.0%
6. Do you feel the high school vocational education graduate is competing for the same job as the postsecondary vocational graduate most of the time?	79	53.7%	46	31.3%	15	10.2%

Table 6-SC

ROLES OF SECONDARY AND POSTSECONDARY EDUCATION

Section III

Secondary Counselors
N=29

Questions	Yes		No		No Opinion	
	Frequency	% of N	Frequency	% of N	Frequency	% of N
1. Considering the trend towards longer formal education for all students, do you feel that all occupational education should be taught at the secondary level?	28	96.6%	0	0	1	3.5%
If Yes, do you feel that basic occupational education should begin at the secondary level and progress to advance occupational training in the postsecondary school years?	24	82.8%	3	10.3%	2	6.9%
2. Do you feel it is realistic to design secondary vocational programs to prepare students to continue in their speciality at the postsecondary level as well as to immediately enter the labor force?	24	82.8%	3	10.3%	1	3.5%

Questions	Yes		No		No Opinion	
	Frequency	% of N	Frequency	% of N	Frequency	% of N
3. Do you feel it is realistic to design secondary vocational programs in extended time periods (2 & 3 hour blocks) for indepth concentration of curricula?	24	82.8%	4	13.8%	1	3.5%
4. Do you feel high school vocational programs in our area provide the occupational preparation needed by a student to successfully continue in the postsecondary occupational program?	14	48.3%	7	24.1%	7	24.1%
5. Do you feel there is unnecessary overlap and duplication in the vocational curriculum at secondary and postsecondary levels?	9	31.0%	12	41.4%	8	27.6%
6. Do you feel the high school vocational education graduate is competing for the same job as the postsecondary vocational graduate most of the time?	13	44.8%	12	41.4%	4	13.8%

Table 6-PA

ROLES OF SECONDARY AND POSTSECONDARY EDUCATION

Section III

Postsecondary Administrators
N=31

Questions	Yes		No		No Opinion	
	Frequency	% of N	Frequency	% of N	Frequency	% of N
1. Considering the trend towards longer formal education for all students, do you feel that all occupational education should be concentrated in the postsecondary school years?	7	22.6%	23	74.2%	1	3.2%
If Yes, do you feel that high schools should teach only the basic liberal subjects career exploratory or prevocational types of curricula?	8	25.8%	2	6.5%	1	3.2%
2. Do you feel it is realistic to design secondary vocational programs in extended time periods (2 & 3 hour blocks) for indepth concentration of curricula?	20	64.5%	8	25.8%	1	6.5%

Questions	Yes		No		No Opinion	
	Frequency	% of N	Frequency	% of N	Frequency	% of N
3. Do you feel it is realistic to design secondary vocational programs to prepare students to continue in their speciality at the postsecondary level as well as to immediately enter the labor force?	24	77.4%	7	22.6%	0	0
4. Do you feel high school vocational programs provide the occupational preparation needed by a student to successfully continue in postsecondary occupational programs?	11	35.5%	14	45.2%	4	12.9%
5. Do you feel there is unnecessary overlap of curriculum at secondary and postsecondary levels?	9	29.0%	17	54.8%	5	16.1%
6. Do you feel the high school vocational education graduate is competing for the same job as the postsecondary vocational graduate most of the time?	9	29.0%	21	67.7%	1	3.2%

Table 6-PI

ROLES OF SECONDARY AND POSTSECONDARY EDUCATION

Section III

Postsecondary Instructors
N=102

Questions	Yes		No		No Opinion	
	Frequency	% of N	Frequency	% of N	Frequency	% of N
1. Considering the trend towards longer formal education for all students, do you feel that all occupational education should be concentrated in the postsecondary school years?	38	37.3%	58	56.9%	3	2.9%
If Yes, do you feel that high school should teach only the basic liberal subjects career exploratory or prevocational types of curricula?	31	30.4%	14	13.7%	4	3.9%
2. Do you feel it is realistic to design secondary vocational programs in extended time periods (2 & 3 hour blocks) for indepth concentration of curricula?	65	63.7%	17	16.7%	17	16.7%

Questions	Yes		No		No Opinion	
	Frequency	% of N	Frequency	% of N	Frequency	% of N
3. Do you feel it is realistic to design secondary vocational programs to prepare students to continue in their speciality at the postsecondary level as well as to immediately enter the labor force?	64	62.8%	23	22.6%	9	8.8%
4. Do you feel high school vocational programs provide the occupational preparation needed by a student to successfully continue in postsecondary occupational programs?	30	29.4%	43	42.2%	26	25.5%
5. Do you feel there is unnecessary overlap of curriculum at secondary and postsecondary levels?	26	25.5%	52	51.0%	19	18.6%
6. Do you feel the high school vocational education graduate is competing for the same job as the postsecondary vocational graduate most of the time?	24	23.5%	66	64.7%	8	7.8%

Table 6-PC

ROLES OF SECONDARY AND POSTSECONDARY EDUCATION

Section III

Postsecondary Counselors
N=6

Questions	Yes		No		No Opinion	
	Frequency	% of N	Frequency	% of N	Frequency	% of N
1. Considering the trend towards longer formal education for all students, do you feel that all occupational education should be concentrated in the postsecondary school years?	1	16.7%	5	83.3%	0	0
If Yes, do you feel that high school should teach only the basic liberal subjects career exploratory or prevocational types of curricula?	1	16.7%	1	16.7%	0	0
2. Do you feel it is realistic to design secondary vocational programs in extended time periods (2 & 3 hour blocks) for indepth concentration of curricula?	2	33.3%	3	50.0%	1	16.7%

Questions	Yes		No		No Opinion	
	Frequency	% of N	Frequency	% of N	Frequency	% of N
3. Do you feel it is realistic to design secondary vocational programs to prepare students to continue in their speciality at the postsecondary level as well as to immediately enter the labor force?	5	83.3%	1	16.7%	0	0
4. Do you feel high school vocational programs provide the occupational preparation needed by a student to successfully continue in postsecondary occupational programs?	2	33.3%	3	50.0%	1	16.7%
5. Do you feel there is unnecessary overlap of curriculum at secondary and postsecondary levels?	3	50.0%	3	50.0%	0	0
6. Do you feel the high school vocational education graduate is competing for the same job as the postsecondary vocational graduate most of the time?	3	50.0%	3	50.0%	0	0

Table C-1

Scale: 1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree
5. Not Sure

MEANS AND STANDARD DEVIATIONS OF THE RESPONSES FOR THE SIX POPULATION GROUPS

SECTION I

	Secondary			Postsecondary		
Activity	Administrators[a]	Instructors[a]	Counselors[a]	Administrators[a]	Instructors[a]	Counselors[a]
1. Joint meetings with staff from other schools	1.75(0.80)	1.59(0.72)	1.58(0.64)	1.65(0.61)	1.77(0.90)	1.33(0.52)
2. Shared course descriptions and program requirements	1.50(0.51)	1.57(0.73)	1.55(0.69)	1.62(0.78)	1.76(0.88)	1.50(0.55)
3. Coordinated program objectives	1.69(0.85)	1.64(0.66)	1.54(0.69)	1.84(0.75)	1.82(0.89)	1.67(0.52)
4. Coordinated student follow-up program	1.86(0.88)	1.79(0.78)	1.68(0.77)	1.84(0.85)	1.87(0.97)	1.80(0.84)
5. Exchanged curriculum guides	1.79(0.82)	1.77(0.78)	1.57(0.69)	1.96(0.52)	1.78(0.98)	1.60(0.55)
6. Jointly developed curriculum guides	1.79(0.91)	1.79(0.93)	1.59(0.85)	2.13(0.85)	2.10(1.04)	2.33(0.82)
7. General discussions of student placement	1.96(0.84)	1.93(0.94)	1.75(0.89)	1.88(0.88)	1.99(0.90)	1.83(0.75)

Activity	Secondary			Postsecondary		
	Administrators[a]	Instructors[a]	Counselors[a]	Administrators[a]	Instructors[a]	Counselors[a]
8. Individual discussions of student placement	1.85(0.95)	1.91(0.89)	1.69(0.74)	2.13(0.87)	1.97(1.05)	1.80(0.45)
9. Student transfer guides between schools	1.77(0.95)	1.80(0.89)	1.58(0.83)	1.86(0.65)	1.64(0.86)	1.50(0.84)
10. Joint institute career days	1.82(0.98)	1.80(0.88)	1.59(0.89)	1.80(0.65)	1.78(0.98)	2.33(0.82)
11. Teacher exchange program	2.17(1.09)	2.25(1.02)	1.83(0.87)	2.21(0.83)	2.37(1.07)	2.00(0.89)
12. Teacher visitations to other schools	1.76(0.87)	1.53(0.73)	1.50(0.69)	1.52(0.57)	1.71(0.71)	1.67(0.52)
13. K-14 curriculum committees	1.89(1.05)	2.00(0.94)	1.85(0.82)	2.05(0.79)	1.94(1.18)	2.33(0.82)
14. Jointly developed student/parent guides	2.03(0.91)	2.00(0.92)	1.83(0.83)	2.25(0.79)	2.02(1.14)	2.25(0.96)
15. Expanded student records	2.07(0.86)	2.12(0.93)	2.28(0.98)	2.58(0.77)	2.11(1.21)	2.67(0.58)
16. Coordinated testing program	1.81(0.68)	2.06(0.93)	1.93(0.83)	2.30(0.70)	1.86(1.00)	2.00(0.63)
17. Joint in-service programs	1.86(0.80)	1.70(0.82)	1.79(0.82)	1.93(0.72)	2.11(1.00)	2.33(0.52)
18. Joint adminstrative articulation meetings	1.43(0.63)	1.96(0.93)	1.78(0.89)	1.79(0.63)	1.90(1.03)	1.75(0.50)
19. Joint program craft advisory committees	1.71(0.53)	1.89(0.86)	1.75(0.74)	2.33(0.76)	2.03(1.18)	1.50(0.58)

	Secondary			Postsecondary		
Activity	Administrators[a]	Instructors[a]	Counselors[a]	Administrators[a]	Instructors[a]	Counselors[a]
20. Identified occupational role for each institution	1.44(0.58)	1.78(0.87)	1.81(0.83)	1.74(0.71)	1.85(1.04)	1.33(0.52)

NOTE: Responses given for scale category #5—"Not sure" were deleted

[a] Numbers in parentheses are standard deviations

Table C-2

Scale: 1. Strongly Agree
2. Agree
3. Disagree
4. Strongly Disagree
5. Not Sure

MEANS AND STANDARD DEVIATIONS OF THE RESPONSES FOR THE SIX POPULATION GROUPS

SECTION II

	Secondary			Postsecondary		
Activity	Administrators[a]	Instructors[a]	Counselors[a]	Administrators[a]	Instructors[a]	Counselors[a]
1. Increased efforts to improve articulation among all K-14 vocational delivery systems	1.48(0.51)	1.71(0.66)	1.62(0.57)	1.60(0.50)	1.59(0.73)	1.50(0.55)
2. Shared facilities and staff, where feasible, among secondary and post-secondary programs	1.96(0.82)	2.28(0.89)	1.58(0.58)	2.15(0.82)	2.35(1.05)	2.20(0.84)
3. Secondary/postsecondary cooperative approach to develop sequential curriculum in occupational programs that can be directly linked	1.50(0.58)	1.78(0.65)	1.55(0.51)	1.80(0.66)	1.71(0.84)	1.80(0.45)
4. Standardized course objectives and identified competencies for those secondary/postsecondary programs that can be linked	1.50(0.64)	1.73(0.63)	1.48(0.51)	1.96(0.71)	1.91(0.85)	1.67(0.82)

Activity	Secondary			Postsecondary		
	Administrators[a]	Instructors[a]	Counselors[a]	Administrators[a]	Instructors[a]	Counselors[a]
5. Joint development and sharing of labor market data for program planning	1.48(0.51)	1.62(0.59)	1.63(0.56)	1.54(0.74)	1.62(0.70)	1.33(0.52)
6. Increased involvement of business and industry in vocational curriculum development	1.24(0.44)	1.40(0.61)	1.45(0.51)	1.24(0.51)	1.45(0.62)	1.33(0.52)
7. Formal communication and sharing between public delivery systems and proprietary schools	1.92(0.56)	1.96(0.80)	1.90(0.54)	2.00(0.98)	1.94(0.87)	1.80(0.84)
8. Joint secondary/postsecondary inservice planning and staff development workshops	1.92(0.69)	1.90(0.70)	1.85(0.53)	1.97(0.57)	2.00(1.02)	1.80(0.45)
9. Increased involvement and planning with agencies such as METRA, Labor, Manpower Advisory Committee, Private Industry Council, Chamber of Commerce, Employment Security, etc.	1.57(0.57)	1.76(0.67)	1.69(0.60)	1.90(0.49)	1.82(0.86)	1.80(0.45)
10. Joint development of guidelines for appropriate placement and credit between secondary/postsecondary	1.68(0.67)	1.83(0.65)	1.72(0.53)	1.83(0.71)	1.79(0.81)	1.50(0.55)

Activity	Secondary			Postsecondary		
	Administrators[a]	Instructors[a]	Counselors[a]	Administrators[a]	Instructors[a]	Counselors[a]
11. Secondary/postsecondary joint development of competency or skill measurement criteria for recognition of occupational proficiencies	1.56(0.58)	1.69(0.69)	1.52(0.58)	1.82(0.67)	1.56(0.82)	1.67(0.52)
12. Single local advisory committee common to secondary and postsecondary content areas that can be linked	1.93(0.65)	1.89(0.77)	1.68(0.56)	2.45(0.96)	1.96(1.04)	2.60(0.55)

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NOTE: Responses given for scale category #5 - "Not sure" were deleted

[a] Numbers in parentheses are standard deviations

Table C-3

Scale: 1. Almost Never
2. Occasionally
3. Undecided
4. Frequently
5. Almost Always

MEANS AND STANDARD DEVIATIONS OF THE RESPONSES FOR THE SIX POPULATION GROUPS

SECTION III
What Is/What Should Be

	Secondary					
	Administrators[a]		Instructors[a]		Counselors[a]	
Activity	What Is	What Should Be	What Is	What Should Be	What Is	What Should Be
1. Efforts are made to coordinate course content between my school and the public postsecondary programs within the Metro Nashville Area	1.50(0.76)	4.12(1.21)	1.82(1.18)	3.86(1.07)	2.38(1.27)	4.48(0.59)
2. Efforts are made to coordinate course content with private postsecondary programs within the Metro Nashville area	1.42(0.95)	3.69(1.26)	1.53(0.94)	3.42(1.28)	2.12(1.24)	3.96(0.93)
3. Overlap in similar curriculum materials presented at postsecondary levels constitutes a problem for the secondary vocational program graduates	2.84(1.28)	2.36(1.22)	2.36(1.12)	1.97(1.09)	2.50(1.27)	1.64(1.04)

	Secondary					
	Administrators[a]		Instructors[a]		Counselors[a]	
Activity	What Is	What Should Be	What Is	What Should Be	What Is	What Should Be
4. Closer cooperation and program planning between secondary and post-secondary schools would enhance occupational preparation and avoid any unnecessary duplication	1.44(0.77)	4.23(1.18)	1.85(1.06)	3.76(1.28)	2.48(1.19)	4.54(0.72)
5. Students are adequately oriented to career awareness in the elementary school programs in the Metro Schools	1.96(1.08)	4.50(0.91)	1.87(0.95)	4.10(1.05)	2.15(0.86)	4.58(0.58)
6. Students are adequately oriented to secondary vocational program opportunities in the middle school programs in the Metro Schools	2.44(1.33)	4.60(0.82)	2.04(1.06)	4.34(0.89)	2.22(0.85)	4.54(0.76)
7. Career counseling is included as a responsibility of the guidance counselors at our school	3.72(1.28)	4.92(0.28)	2.63(1.43)	4.56(0.83)	4.26(0.81)	4.84(0.37)
8. Career counseling is included as a responsibility of vocational instructors at our school	3.28(1.40)	4.72(0.68)	3.66(1.31)	4.23(1.05)	3.42(1.24)	4.48(0.96)
9. An adequate system of placement and followup for vocational graduates, either employment and/or postsecondary education, exists in our school	2.72(1.31)	4.64(0.86)	2.67(1.36)	4.48(0.87)	2.92(1.26)	4.58(0.72)
10. Students completing vocational programs at the secondary level are eligible for advanced placement or credit at postsecondary institutions in our area	2.16(0.99)	4.36(0.95)	2.30(1.27)	4.03(1.04)	1.96(0.93)	4.18(1.01)

Activity	Secondary					
	Administrators[a]		Instructors[a]		Counselors[a]	
	What Is	What Should Be	What Is	What Should Be	What Is	What Should Be
11. My school provides vocational graduates with adequate information concerning postsecondary vocational training available in our community	3.52(1.33)	4.76(0.44)	3.32(1.26)	4.58(0.73)	3.60(1.32)	4.74(0.45)
12. Students who have completed vocational training at our school and want apprenticeship opportunity can receive advanced standing in the apprenticeship program	2.04(0.98)	4.44(0.82)	2.43(1.07)	4.13(0.93)	2.60(1.29)	4.39(0.78)

NOTE: Secondary and postsecondary respondents received different forms for responding to Section III.

[a] Numbers in parentheses are standard deviations

Table C-3

Scale: 1. Almost Never
2. Occasionally
3. Undecided
4. Frequently
5. Almost Always

MEANS AND STANDARD DEVIATIONS OF THE RESPONSES FOR THE SIX POPULATION GROUPS

SECTION III
What Is/What Should Be

	Postsecondary					
	Administrators[a]		Instructors[a]		Counselors[a]	
Activity	What Is	What Should Be	What Is	What Should Be	What Is	What Should Be
1. Efforts are made to coordinate course content between my institution and the secondary programs within the area	1.37(0.56)	3.77(1.10)	1.65(0.94)	3.59(1.23)	1.67(1.21)	4.00(1.22)
2. Efforts are made to coordinate course content with other post-secondary programs within the Metro Nashville area	1.67(0.84)	3.43(1.25)	1.76(1.09)	3.48(1.21)	1.33(0.52)	3.80(1.10)
3. Overlap in similar curriculum presented at secondary levels constitutes a problem for post-secondary vocational programs	2.00(0.95)	1.80(1.00)	2.11(1.10)	1.87(1.03)	3.17(1.17)	2.40(1.67)

Activity	Postsecondary					
	Administrators[a]		Instructors[a]		Counselors[a]	
	What Is	What Should Be	What Is	What Should Be	What Is	What Should Be
4. Closer cooperation and program planning between postsecondary and secondary schools would enhance occupational preparation and avoid unnecessary duplication	1.83(0.80)	4.10(1.14)	2.20(1.05)	3.86(1.13)	1.60(0.89)	3.67(1.75)
5. Most basic skills required of students continuing occupational preparation at the postsecondary level have been adequately covered by secondary schools	1.93(0.87)	4.50(0.78)	2.15(1.08)	4.40(1.03)	2.50(1.64)	4.80(0.45)
6. Students with prior vocational training at the secondary level are eligible for advanced placement or credit based on demonstrated proficiency	2.50(1.41)	4.17(1.12)	2.67(1.40)	3.69(1.25)	2.00(1.10)	4.20(0.84)
7. My school provides secondary schools with adequate information concerning appropriate courses and ability placement in occupational fields	2.90(1.54)	4.53(0.78)	3.15(1.31)	4.22(1.01)	2.83(1.72)	4.60(0.55)
8. Students who have completed vocational training at our school and want apprenticeship opportunity can receive advanced standing in the apprenticeship program	2.48(1.37)	3.52(1.31)	2.76(1.19)	3.70(1.10)	2.83(1.33)	3.80(0.84)

Activity	Postsecondary					
	Administrators[a]		Instructors[a]		Counselors[a]	
	What Is	What Should Be	What Is	What Should Be	What Is	What Should Be
9. Most students who have completed secondary vocational training are placed in appropriate courses compatible with their previous occupational selection	3.17(1.34)	4.41(0.87)	3.03(1.21)	4.06(1.03)	3.50(0.55)	3.60(0.89)
10. High school vocational education graduates should be encouraged to enroll in postsecondary career programs as a means of continuing their education	3.00(1.10)	4.17(0.97)	2.89(1.13)	4.29(0.89)	3.60(0.55)	4.00(1.26)

NOTE: Secondary and postsecondary respondents received different forms for responding to Section III.

[a] Numbers in parentheses are standard deviations